

THE GROUP-STUDY PLAN

"Democracy, then, means an equal chance for
unequal minds."—PRESIDENT FAUNCE

THE GROUP-STUDY PLAN

A TEACHING TECHNIC BASED ON
PUPIL PARTICIPATION

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INTRODUCTION

In the confusion of opinions among educators and critics of educational practices concerning whom to "educate" and what to teach, there is room for contention that we ought to do better the things we are trying to do. Many people exercising freedom to doubt appear to be losing faith in democratic education. An introductory note of warning is sounded with no illusions about the probability of doing the wrong things very skilfully. A continuous, critical examination of the processes of democracy is essential to an understanding of a changing order and also a means of securing the dynamic stability of institutions by bringing them down to date and adapting them to new conditions.

Fresh and challenging experiments which break sharply with tradition do not shock the student of history. To become expectant of change is an attitude of mind of primary importance in the development of science. Less spectacular modifications within accepted forms are none the less genuine contributions to progress. The inventive pioneers should be encouraged to create new patterns. The disposition of the workers back in the old clearings to try new methods, even to abandon practices once approved and fruitful, is a mark of creative intelligence. It is

when easily recognized patterns are blindly accepted and uncritically followed by mechanically minded routine performers that institutions, as well as individuals, need to be born again. A wise educational statesmanship will steer safely between the Scylla and Charybdis of reckless experiment and meaningless tradition.

To carry on great enterprises, organization is necessary. The genius for organization distinguishes the builders of our industrial order. Achievement grips imagination in this age of steam and electricity. Something of this genius for organization has been applied to education. A passion has been developed for operating machines. So much time is consumed in running our labor-saving machinery that we have no time for leisure. Keyserling tells us that modern civilization is characterized by the chauffeur type, meaning by this that primitive man has been made technical. Organized education naturally reflects the civilization of which it is a part as well as contributes to the development of it. There is always the danger of running the machinery for its own sake, or of making organization, which is an instrument or a means, an end in itself.

How to keep the machinery, the organized means of education, so adjusted as to promote the true aim of education—the spirit of learning itself—suggests a major issue in our day and time. To state the problem in these terms is not a denial of the need of organization. A renewed searching of the end of organization is thought to be imperative.

The rising tide of criticism of mass education should arrest attention. The principle of regimentation seems to be the most important one operating in grade schools. It does not disappear in the university. The belief that mass education is a necessary correlate of universal democratic education should be rigorously scrutinized. The fact of large numbers to be educated is presented in support of the lock-step methods which are adopted in school systems. The evils of mass education, it is argued, cannot be eradicated until a selective programme is adopted similar to programmes in European systems of education developed during the past century. A change in organization is urged as a means of correcting this glaring defect in our practices. A corrective, however, that would liberate approximately 10 per cent of our school population, leaving 90 per cent, more or less, the victims of regimentation does not seem to offer a real and valid solution of this perplexing problem.

If mass education is not a necessary correlate of a free system of schools, and if it can be shown that regimentation is due to a misplaced emphasis on organization, then it may be clearly possible to discover a new principle that will secure a balanced growth of individuality. Another kind of organization is projected or, perhaps, a different use of organization is contemplated.

Counts in the indictment of education by and for mediocrity are familiar. The presence of large numbers of individuals of low mentality tends to lower standards of scholarship. Able students are yoked

with the poorest. Work is laid out for mythical "averages" and becomes suitable to none of any group. Standardized and stereotyped lessons are negotiated under the bombardment of routine. Interchangeable units of credit are amassed in school and college with a perversion of the true aims of education. Registering information, merchandizing inert ideas, checking off recitations from a text-book are sterile forms of procedure readily detected by penetrating observers.

Even if valuable results are secured here and there, not because of the system but in spite of it, a weak defense at best is offered. If man, as Aristotle said, is an animal that by nature is a lover of knowledge, it may be expected that some students will continue to kindle consuming flames of curiosity on many altars to truth, no matter what definition of education is promulgated or what kind of teaching is practised. Those students whose goal is a professional career are not suffering acutely under the present regime, although rapid and vigorous reorganization is taking place in higher professional training. It is in the pursuit of what purports to be a "liberal culture" that serious problems arise. With the influx of students who are being put through high school and college by their parents because it is the expected thing to do, we have very frequently undergraduate majorities enjoying some four years in a "grown-up" kindergarten where young men and young women are more interested in the social life and athletics (vicariously expressed) than the intellectual world.

This group comprises many clever students who learn readily the art of "getting by." They know how to substitute prudence for righteousness. They see to it that their studies do not interfere with their "education." This type of student will continue to sift through any screens erected at the doors of higher schools, the purpose of which, it is alleged, is to keep the unfit out.

Huxley wrote prophetic words in 1868 that ring true for America to-day: "A few voices are lifted up in favor of the doctrine that the masses should be educated because they are men and women with unlimited capacities of being, doing, and suffering, and it is as true now as it ever was, that the people perish for lack of knowledge."

One may reflect with profit upon the fact that out of *one hundred* pupils in the fifth grade approximately *sixty-three* finish the eighth grade, *thirty-seven* enter the high school, *twelve* finish the high school, *seven* enter college, *two* finish college. In spite of this startling elimination, college professors are persuaded that they are dealing with a badly damaged lot. Obviously something has happened to *homo sapiens*, this lover of knowledge! The real problems of mass education and collective teaching are found back in the elementary grades.

Moreover, in the light of the fact that a staggering majority of the citizens of the Republic do not get beyond the bare rudiments of schooling, is it not a logical deduction that adult education should express the hope of realizing the broader purposes of

education, such as "citizenship," "ethical character," "cultural efficiency"? The school may achieve marked success in attaining some well-defined immediate objectives as expressed in reading, writing, arithmetic, spelling, drawing. It is not the fault of the school if, for example, millions of people become the prey of the most worthless and, mentally, devastating printed matter. The destructive critic might well direct his energies to an analysis of the social forces and agencies which tend to nullify or which fail to carry on the work and the ideals of the school. Constructive criticism of education is still in order. The results of courageous experimentation point the way to a vital discovery of the land of intelligence.

We have referred to the broader purposing of the school. It is the social view that expresses the trend of things. In whatever phrase the new purpose is clothed, there is a disposition to speak of a contrasting purpose hinging about scholarship. It may be a balanced emotional life, or attitudes, or moral conduct, or civic efficiency, or any one of a score of new and valid aims which the "reformer" uses in his crusading efforts to usher in the millennial day in education. An unfortunate situation has arisen if and whenever the intellectual life is set over against any other form of life creating in the mind of teacher, pupil, administrator, educator, or public the notion of antithesis, or the belief that some broader, nebulous "social" purpose may be a valid substitute for intellectual performance.

The essential genius of the educative process, in so

far as teacher and pupil are concerned, is focussed in the intellectual life. It is the interaction of mind upon mind with a frank objectivity that more and more characterizes the day's work in every classroom in the land. Great teachers have sought to promote the companionship of the intellectual life. Intelligence at work is thinking. In the activity of thought lies the cultural significance of the power, the beauty, and the structure of ideas. If this central purpose is impaired, all plausible aims apart are likely to become spurious. A sound heart is a condition of healthy circulation. The broader purposes are not likely to be attained in an "intellectual vacuum." This emphasis is urged, not to rule out the social view, but to give it a sound basis of support.

We are stressing the need of finding a central unifying core of principles in which and by which to express the function of education in order that guidance may become possible for multitudes of bewildered and confused students, teachers, and parents.

Suddenly the alleged discovery has been made that the difficulty in school and college lies in the presence of large numbers of intellectual paupers striving to attain the distinction of the scholar and the gentleman. There is an enormous amount of rationalization at this point; that is to say, theories are advanced consisting of reasons invented afterward to prove that what we have been doing is sensible.

That standards of scholarship have been lowered, or that a lot of bad theories are entertained about standards, would seem to be obvious. A mere reward-

ing of effort with no serious regard for success would not be considered sound practice in business, music, or athletics. Lowering the hurdles so that all who enter may "pass" without distinction would delete the sportsmanship that sweetens the competition of life and that is not puffed up in reminiscence.

It is difficult to learn and apply the "lesson" that teaches that differences, and not similarities, make possible the corporate life. It is not inconceivable that study might become a "major sport." The student in music is not measuring his effort in terms of the achievement of some weaker brother. He is not content with a minimum essential. So it is with the athlete. He is not aiming to make the lowest hurdles. A forward striving toward a flying goal, an ignition of the spirit that kindles ambition to reach a higher attainment—something of that disposition is lacking in halls of learning. It may be that the registrar's currency (school marks) is a species of fiat money. It may be that a sinister academic disease, *creditis*, has become infectious. Promotion and diplomas and degrees, which ought to be effective instruments in the organization of education, have become the ends themselves.

That some means of educational guidance should be developed as a primary responsibility of organized education will be genuinely conceded, if it is understood that a fact-basis shall be established (if possible) in the light of which freedom in intelligent self-appraisal of fitness to pursue goals to be attained may be exercised. It does not follow that suc-

cess must be guaranteed because effort has been put forth.

A democracy is not expected to underwrite individual adventures. Has a boy failed because, forsooth, he stubs his toe and falls down? He has failed when he refuses to get up and do something about it. No consolation is being offered in this observation to ease the conscience of lazy, mechanically-minded teachers who seem to rejoice over failures in their chosen subjects. Nor is there any desire to suggest a way of enhancing the self-esteem of teachers mothering the curriculum with a touching devotion like unto that of the remnant of the Jews who sat down on the banks of the waters of Babylon and remembered Jerusalem with a sublime loyalty for five hundred years. Insuperable hurdles need not be devised for the purpose of upholding an exclusive scholarship.

Mr. Maguire is an exponent of the new school in which pupil *power* has the right of way over teacher *talk*. He makes the pupil *learning* occupy the centre of the stage. The old methods sought to place the emphasis on the teacher *teaching*. And that emphasis meant too often the teacher telling, ordering, explaining, imposing subject-matter and modes of conduct. Life passed by the old school. In the new approach, school is life.

Mr. Maguire sees the pupil at work. He interprets directing study as a new general method of assisting pupils to think thoroughly, independently, and completely. His aim is not to give out information in

recognizable forms to be memorized or paraphrased, recited, tested, recorded. He is developing a procedure in which the aim is the discipline that comes from encouraging the pupil to use his own mind in a "free-controlled" environment. It is a new school in which each member of a working group may find a challenge to work up to capacity in wholesome rivalry. Mastery and understanding are emphasized as the purpose of performance. The slow-moving mind has a chance. The quick, alert mind is not reduced to mediocrity.

The mystical doctrine of the equality of persons is no longer an obsession. There is no sublimation of that doctrine in an attempt to form groups in terms of classified averages. It is recognized that the slow-moving Diesel engine burning crude oil has ten times the effective cruising radius of that of some high-powered automotive engines. The analogy may be faulty, but it helps to make emphatic a point of departure. The individual is challenged to move forward under his own power. Each person swings his own radius about a common starting-point. Each is encouraged by clear success at his own level. Flexible groupings are made functional within the boundaries of each classroom. Individual needs as they are disclosed in a working laboratory are made the criteria of flexible groupings within any scheduled class. A high degree of individualization is secured without losing the values of a genuine socialization (if these blessed big words may be used).

The outstanding merit of Mr. Maguire's book lies in the fact that it is struck from the forges of the

workshop. A thoroughly practical schoolman is presenting his work. The theories he formulates discover themselves in practice. The child working forward is the heart of his school. The teacher is there to assist the pupil in his search for knowledge. Organization is used as a means in the development of the self-active, responsible individual for whom the processes of self-education are safeguarded.

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CHAPTER I

MEETING INDIVIDUAL NEEDS

In the *Great Didactic*, John Amos Comenius wrote in 1632: "He (the teacher) must stand on an elevated platform, and, keeping all the scholars in his sight at once, allow none of them to do anything but attend and look at him. He must imbue them with the notion that the mouth of the teacher is a spring from which streams of knowledge issue and flow over them, and that, whenever they see the spring open, they should place their attention like a cistern beneath it, and thus allow nothing that flows forth to escape."

The cistern plan has not disappeared from educational practices in democratic America. So often the minds of the scholars are thought of as jugs to be filled, and the hoary custom is to have the "professor" examine the contents of the jugs from time to time to see how much has leaked out. The formal recitation of lessons harks back to a day when the mind was regarded as a room to be furnished. The filling-station conception is with us yet. Lecturing has been defined by Slosson in his happy phrase as that mysterious process by which the contents of the note-book of the professor are transferred through the instrumentation of the fountain-pen to the note-book of the student without passing through the mind of either.

We are more nearly at the beginning of educational progress than at the end. A deliberate programme for creative education has merely begun to make its appeal. Forward-looking teachers are casting about for hints and suggestions by which education for individuality through inquiring types of procedure may be realized. We are beginning to understand that the genius for organization lies in the capacity for revision of ideas, and in a sensitiveness to growing possibilities and changing needs. There are no automatic safeguards handed down from yesterday's custom. Every truth that is living and vital will get itself expressed in new forms. That is the essence of its spontaneous creative power. We do not find resting places at the growing points.

The most conservative educators are convinced that the "lesson hearing" school does not meet the needs of our twentieth-century civilization. The "lesson," the set daily lesson, and the methodology it carries suggest to the alert, scientific student of education the persistence of stereotypes and a disposition to rationalize a practice that grew up under theories long abandoned. The "lesson" meets nobody's needs. All attempts to fit things in education to the "average" pupil reflect the low ebb of mechanical routine into which our schools are driven under the urge to standardize all things—even things of the mind. Groups of pupils at work, and a classroom in which groups find a way of working socially, co-operatively, and up to capacity can be made a tangible process.

Provision for individual differences in pupils is no longer a theme for amiable lecturers at teachers' conventions. The problem method, or the contract plan, or the project level can be negotiated with measurable results in happy and effective achievement. In the Group-Study Plan each pupil works forward in a stimulating and challenging environment; pupil-teacher partnerships¹ are formed; units of work are set out. The passive, listening, absorptive type of learner is not found in this procedure. The furtive pulpit and the mourners' bench have disappeared. No clever little Billies are found in these schoolrooms patiently waiting for the rest to catch up. In brief, here is exhibited the schoolroom as a working laboratory in every subject of the curriculum. The self-active, responsible, co-operative individual is cultivated. School becomes life. Happy and earnest boys and girls work in an atmosphere of tolerant, sympathetic, and creative leadership. The new teacher as well as the new pupil will be found in this school of, by, and for democracy.

Doctor Suzzallo says ("Teaching as a Profession," *N. E. A. Report*, 1926): "We are diagnosing, we are testing, we are discovering the laws of mind, but how far are we, scientifically speaking, developing a technic of teaching? . . . If there are two methods in common use, we ought to know which is the better . . . we ought to measure *ability* when we start and *ability* when we finish . . . if we make ourselves scientifically expert in the performance of

¹ See Hurt, Huber W., *Self-Help in Teaching*, Macmillan, 1921.

our duties, then you may be sure of one thing, that society will give the schools more independence, and the profession more autonomy . . . the basis lies in ethical restraint and in scientific discovery.”¹

¹ See Washburne, C, “Educational Measurement as a Key to Individual Instruction and Promotion,” *Journal of Educational Research*, March, 1922, pp. 195-207.

CHAPTER II

TEACHING AND LEARNING

The problem of the teacher is to develop a procedure which will result in learning by the pupil. Therefore, if we can clarify our ideas concerning this learning we are in a fair way to arrive at a satisfactory definition of teaching.

What do we mean when we say the pupil "learns"? Of course, from the beginning of things learning has been associated with knowing, and we have no dispute with that view-point. Facts will always be wonderful things. But knowledge is power—and we are interested to-day not so much in knowing as in knowing how; not so much in the knowledge as in the power; not so much in the content as in the ability; not so much in gathering as in searching. The modern teacher aims not at learning, but at learning how to learn; he aims to set the pupil free to use his own talents.

Learning is growth. It is obvious that the pupil must grow in power through the exercise of his own efforts, through the awakening of his self-activity. This self-active application to a problem is *study*. The pupil learns through study. As long as he is able and willing to study he will learn; ability and willingness are factors of study. Learning ceases when these fail. If they were unfailing, teachers would not be needed. Teaching, then, is the art of

fanning the flames, directing the blaze, and breathing the breath of life into the dying spark.

Teaching is *causing to learn*. It is a procedure that bases its technic upon *study* because it is through the study that the pupil learns. Teaching is a process which makes study possible, encourages study, organizes study-effort, indicates the course the study is to take and applauds its results. Whatever action the teacher takes that results in successful study and growth by the pupil is teaching. Teaching is causing to learn, to grow. It is the art of directing study; nothing else is teaching—not talking, not lecturing, not “lesson-hearing.” And the best teaching operates through economy—economy of teacher-effort and of pupil-time.

Our problem, then, is one of organization, of working out a plan of procedure which will afford scope for the alternations of the teaching-learning process; and which will do this with economy. The alternations may be stated as:

(1) *The teacher's duty.*

- a. To applaud accomplishment } (the check.)
and to rectify errors.
- b. To organize the pupil's attack upon new work.
- c. To encourage the attack upon a stated problem.

(2) *The pupil's duty.*

- d. Self-active application to the problem resulting from (1).

The alternations constitute the “challenge” or lesson, and it will be agreed that both are vital.

Neither may be omitted. Step 1 is the "assignment," step 2 is the "study."

A series of diagrams may be of value. Diagram I is a plot of the lesson period used in city schools:

DIAGRAM I

The entire period is devoted to "assignment." The recitation is included.

No provision is made for "study." Study is left for a home duty.

The alternations are incomplete.

Worked out on the basis of the *alternations*, the lesson period will be plotted as in Diagram II:

DIAGRAM II

First part of period.

Assignment.

Checking (recitation).

Presentation.

Motivation.

Teacher activity prominent.

Second part of period.

Study.

Pupils active in pursuit of their problems.

This plan is a step in advance because it provides for the functioning of the alternations of assignment and study. Superintendent Barker of Oakland, Calif., used it in the junior high schools there with good results.¹ But, with all its virtues this method has two serious defects in view of modern necessities of method and classroom management. The test of modern educational procedure is its effect upon the individual pupil. Any device that is based upon unit-class treatment is open to criticism. The presumption that all the pupils of any standard school class are alike in need, in ability, in "initiative, in aggressiveness, in talkativeness, in attractiveness of personality" is untenable. "Adoption of the modern conceptions in education carries with it the necessity of facing anew the detailed problems of method and classroom management."² Doctor Horn's study showed (1) that the ratio of participation between the poorest and the best pupils in classes of the unit type was one to four; (2) that this variation increased with advancement through the grades; (3) that in various types of subject-matter type mentalities registered widely variant reactions. In brief, any modern method must take into account the individual differences of pupils. It is realized today that it may be charged against the "old" school that it fell into the pit of regimentation.

The second defect in the plan as given is its

¹ Barker, Albert C., "The Intermediate School or Junior High School," *N. E. A. Journal Addresses and Procedure*, 1917, pp. 266-271.

² Horn, Ernest, *Distribution of Opportunity for Participation Among the Various Pupils in Classroom Recitation*.

presumption of the infallibility of the teacher in leaving to his discretion the drawing of the line between the assignment and the study, between the first half-period and the second. The weakness here is the non-elimination of the human equation. Teachers are decidedly human, and the temptation to extend the activities of the assignment, and the recitation which is part of it, may be strong. In other words, the alternations are suggested and planned, but not automatized. A scheme must be worked out which will not only suggest, but promote the alternations and, at the same time, provide for the common needs of pupils, for pupil-self-activity and pupil-self-direction with the corollary—the suppression of the lecturing teacher. If we can evolve a plan that will produce these with *economy* of teacher-energy and pupil-time we will be on the road to making a real contribution.

It is evident that the modern trend is toward a grouping of pupils according to their needs, their abilities, their personalities. We can make a beginning then, for purposes of simplicity, by grouping our pupils in two groups, basing the grouping upon any of these factors, and the plot of the period will appear as in Diagram III, on next page.

The division of the class into these two groups immediately sets things in motion. The class can remain static no longer; action begins. The teaching technic undergoes a change. There is a new series of problems for the teacher, who sees at once the need for new skills on his part. Organization must

DIAGRAM III

<p style="text-align: center;">FIRST HALF</p> <p style="text-align: center;"><i>Group A</i></p> <p>Assignment <i>Teacher</i> with this group first half of period.</p>	<p style="text-align: center;">OF PERIOD</p> <p style="text-align: center;"><i>Group B</i></p> <p>Study</p>
<p style="text-align: center;">SECOND HALF</p> <p style="text-align: center;"><i>Group A</i></p> <p>Study</p>	<p style="text-align: center;">OF PERIOD</p> <p style="text-align: center;"><i>Group B</i></p> <p>Assignment <i>Teacher</i> with this group second half of period.</p>

now succeed domination; planning toward automatization of the alternations and mechanization of classroom routine must succeed formality. With study as the key-note there must be developed study-mindedness in the pupils and devices for the guidance of study-activity. Responsibility will begin to shift from the teacher to the hitherto care-free pupil, who now finds himself confronted with a definiteness of responsibility that puts him on his mettle. Pupil-self-direction begins to function because pupil-self-activity demands it; the pupil-at-work proves to be a different creature from the pupil-waiting-to-be-called-upon who inhabited the

classroom before. The checking system holds him to his task in the study and sharpens his participation in the assignment.

In other words, the grouping results *automatically* in the development of unsuspected powers and virtues in the pupils, while, at the same time, it changes the outlook of the teacher, upon whom there is now *obligated* a new demand. Lecturing and "lesson-hearing" are no more; pupil-work takes the place of teacher-talk. And it is essential that it be realized that these gains are *automatic and natural products of the grouping*. We wish to make it clear that we realize that all the gains we claim for the Group-Study Plan might work out as well in a unit class as in Diagram I, but we hold that they won't and they don't in actual practice because of the unfounded presumptions under which unit classes function.¹ But we point out that, under the Group-Study Plan they *must* work out because of the mechanizations of the method. Study *must* function, (1) because of the homogeneity of the group assignment which has preceded it; (2) because of its habituation in every period of the day; (3) because of its chart guidance and organization; (4) because of the imminence of the check which will follow it. And it *can* function because it is an uninterrupted activity which the pupil makes his own; uninterrupted because the teacher and the assignment

¹ See Horn, Ernest, "*Distribution of Opportunity for Participation Among the Various Pupils in Classroom Recitation.*" Teachers College, Columbia University, 1914.

group are busy in another part of the room. The stage is set.

The assignment also *must* function successfully because it is participated in by a homogeneous group with like needs and abilities. Its fitness is its salvation, and the smaller the group the more effective the application. The alternations once established, the teacher will devise means of organizing these smaller groups. The pupils, meanwhile, gaining in power of self-sustained effort, become agents for, instead of being indifferent to, the process.

An examination of the plot in Diagram III will reveal that we have gained: (1) the alternations; (2) partial homogeneity through grouping. Further examination shows that we have achieved (3) some obligation in the directions of pupil-self-activity in the study and (4) suppression of the interfering teacher; because the teacher is at this point a greater problem than the pupil, and we have put the teacher to work where his assignment activity will do the most good and where he cannot interfere with the work of the study groups. It is axiomatic that the study must be *self-active*, and the intervention or "supervision" by the teacher cannot help it. The pupil must be left alone to study. All teacher-activity is confined to the *assignment*, where errors, failures, and successes of the study will reveal themselves.

(5) Economy functions also from the grouping. The plot shows that the assignment is always projected with a compact group, the members of which have like needs and like abilities. There is little



Four self-active groups in English Composition and Literature. Note pupil-leader and teacher checking.

waste because there is little indifference, no pupil being "over his head." All are participants. Economy of teacher-energy is a concomitant of another factor also. The assignment phase is always carried on with small groups; the study group must not be interfered with. Therefore the assignments are always conducted with the pupils *standing* about the teacher in a corner of the classroom, the activity progressing in a conversational tone with subdued voices that do not reach the studying group at their seats or at the blackboards. The strain is off. The teacher is rarely confronted with the entire class. Economy of pupil-time results from the intensification of the assignment in small homogeneous groups, and in the study because of the completeness and fitness of the assignment which has preceded it. And the automatizations appear in all these because the pupil becomes habituated to the alternations and the routine and makes himself a self-governing, self-sustaining factor in the procedure. In other words, the plan works toward the development of pupil responsibility for his own results.

To summarize: Through the Group-Study Plan we are in line to gain: (1) the proper use of technic through the alternations; (2) provisions for individual pupil-needs; (3) economy of teacher-energy and pupil-time; (4) automatization of routine; (5) obligation to all of these. And it will be obvious that the social factor looms large.

Diagram IV is an illustrative schedule indicating possibilities for four groups. The period is arbitrarily

divided into four quarters and the pupils into quartiles: Group A is the brightest group, Group D the slowest. The arbitrary division is for purposes of

DIAGRAM IV

期	GROUP A	GROUP B	GROUP C	GROUP D
	<i>Assignment</i> <i>Teacher participat-</i> <i>ing</i> 1 Check. 2 Discussion of new matter 3 Chart organiza- tion.	<i>Study of matter car-</i> <i>ried over from previ-</i> <i>ous period concluded</i> <i>to be ready for check</i>	<i>Study</i> Continua- tion of work of previ- ous period in note- books	<i>Study of new mat-</i> <i>ter presented at end</i> <i>of previous period.</i> Pupils work at blackboards to make social contribution.
First quarter (Ten min- utes.)				
Second quarter (Ten min- utes.)	<i>Study of matter just</i> <i>presented begun</i> Note-books in use	<i>Assignment</i> <i>Teacher participat-</i> <i>ing</i> 1 Check 2 New topic pre- sented 3 Organization in- dicated	<i>Study</i> concluded to be ready for check.	<i>Study</i> continued at blackboards
Third quarter (Ten min- utes.)	<i>Study</i> continued.	<i>Study</i> of new topic begun in note-books.	<i>Assignment</i> <i>Teacher participat-</i> <i>ing</i> 1 Check 2 Discussion 3 Procedure en- couraged	<i>Study</i> concluded in readiness for check to follow. Blackboards checked by fellows under a leader and corrections made
Fourth quarter. (Ten min- utes.)	<i>Study</i> concluded if possible ready for check in following period.	<i>Study</i> continued.	<i>Study</i> of matter just discussed	<i>Assignment</i> <i>Teacher participat-</i> <i>ing</i> 1 Check. 2 Discussion. 3 New topic. Group moves from blackboard to black- board with teacher for check
Five minutes	Final five minutes of the period used for general class discussion of unit needs			
Total, 45 minutes.				

clearness only. It suffices to show that the elements of method and management may be mechanized to the point where every individual is engaged in *study* for three-quarters of the time; where the material may be gauged to fit his needs; where he will find himself one of a homogeneous group; where the

teacher may be automatically and economically engaged in proper "teacher-activity," and the pupil in "pupil-activity" or *study*. It will be observed also that one group (in this case the slowest group) is working at the blackboards with a definite purpose in view beyond selfish gain. Their work, being visible to all, is the basis for community criticism and is a social contribution for the good of their fellows in the group, who criticise and check each blackboard in rotation, passing along the boards in a small, compact group for this purpose. At the end of the period these blackboards are available for the benefit of the entire class if such is desired.

Diagram V indicates a simple variation of class organization which brings the teacher into contact with every group at some time during the period, with assignments of fifteen minutes each to two of the groups and checks upon individuals of the other two groups of five minutes each. It will be noted that Group D and Group C receive full assignments and have most of the attention of the teacher. In a following period the organization will provide like treatment for Group A and Group B. This scheme has the advantage for upper-grade classes of continuous self-application (*study*). For the teacher it provides freedom to apply himself where he is needed. The two five-minute checks are individual, the teacher moving from desk to desk for conferences with pupils over their note-books. *The schedule given is, of course, arbitrary. In actual procedure in the classroom the alternations are less formal.*

The intention is to point the way toward classroom organization where *study* is the dominant note. The ideal situation is one in which *all the pupils are studying* and the teacher is free to give himself to

DIAGRAM V

	GROUP A	GROUP B	GROUP C	GROUP D
First half-period.	Study with note-books of matter assigned in a previous period (Fifteen minutes)	Study This group is at work on the blackboards with text-books, etc., preparing a social contribution to be seen by all at the end of the period This study work is sustained throughout the period in anticipation of the check by the teacher at the end. A check by the group-leader and a discussion under his direction will precede the teacher's check, the group moving from one blackboard to the next for observation and comment on each (Thirty-five minutes)	Study Completion of matter carried over from previous period Note-books submitted to group leader and corrections made	Assignment by teacher 1 Check on work done 2 Presentation of new work 3 Organization points indicated (Fifteen minutes)
	Check by teacher on individual progress in conferences from desk to desk (Five minutes.)			Teacher leaves group while they read over the topic before organization (Five minutes)
Second half-period	Study continues at seats with note-books throughout the period. (Twenty minutes.)	Teacher checks study accomplishment of this group, surveying blackboards (Five minutes)	Assignment by teacher 1 Check on work done 2 Discussion 3 Presentation of new work 4 Organization points indicated (Fifteen minutes.) Group left alone to prepare for the study which is to be begun next period (Five minutes.)	Study of topic just assigned begun in note-books and carried through the period and into the next, or continued at home (Twenty minutes)
	Final five minutes for unit-class directions, discussion, etc			

individuals who need him. As long as the pupil can learn by his own efforts the study will maintain itself, and the checks by the teacher will reveal conditions so that he will know when an assignment is needed by an individual or a group. And when that time comes the teacher must be *free* to give that assignment; that is, the other pupils must be engaged with their own problems. In ideal conditions,

the teacher's duties are: (1) To check individual study progress, and (2) to "assign" new work when the old is completed. The study is the duty of the pupil unassisted.

Diagram VI is given in illustration of this point. It plots a period in which all the assignments are carrying over and each group is at work upon its own problem, some at blackboards and the others at their desks; all have text-books and reference-books, and the seated pupils are using note-books. Individuals move about as the necessity for consultation of references necessitates; talking is, of course, permitted. The teacher is free—which means he may use his time and his energies to the best advantage. This he will determine by moving from one pupil's desk or blackboard to another, sensing the difficulties that are common to some and noting who these individuals are so that he may call them into a group for conference. Thus a fluidity of organization arises; needs are seen and corrections made economically. Those who can study do study and continue to study; those who cannot are set on their way quietly and easily and resume their study where they left off.

Then the teacher, free again, resumes his observation and checking, and another group forms. In this fashion the teaching is placed upon an individual basis; every pupil gets attention *when he needs it*, none is neglected that another may have more than his share. The bright pupil is not held waiting for the slow pupil, nor, on the other hand, does the

DIAGRAM VI

GROUP A	GROUP B	GROUP C	GROUP D
STUDY	STUDY	STUDY	STUDY
<p>All the pupils at work throughout the period upon matter which each understands and the teacher <i>free</i> to move about the room checking individuals at their desks or at their blackboards. This checking by the teacher results in:</p> <ol style="list-style-type: none"> 1. Individual discussions with pupils whose un-common difficulties demand such treatment. 2. The formation of new groups, all the members of which will have like difficulties. 3. Assignments to these newly formed groups covering their problems. <p>This organization is the ideal toward which the group-study plan aims. It makes for:</p> <ol style="list-style-type: none"> 1. Pupil-self-activity. 2. Development of pupil-power. 3. Pupil-responsibility. 4. Suppression of the lecturing teacher. 5. Democracy in the schoolroom. 			

bright pupil or the talkative pupil monopolize the discussion at the expense of his less gifted classmates. It is as close an approach to individual instruction as the modern classroom affords.

CHAPTER III

THE ASSIGNMENT MADE FUNCTIONAL

MAKING THE STUDY POSSIBLE

The teacher's function in the teaching-learning process is to organize the activities of the classroom to the end that the pupil may and will study. It is the "assignment" in which the study process is made possible. The assignment needs all the teacher's skill and wisdom because upon it depends the success of the study—the main phase of the challenge. Failure or success in the study become manifest in the *recitation* (check) which follows as part of the next assignment. By the term *recitation* we mean the pupil's contribution to the assignment in whatever form it may take. He can contribute only what he has; so his *recitation*, in the form of a note-book, an essay, a report, a map, a chart, a summary, or an oral statement is, to use a Herbartianism, the apperceptive step in the assignment. At the same time it is a *check* upon his study, because it reveals his conquest of the challenge—or his surrender to it. Sufficiency of the assignment means fulness in the study; insufficiency means meagreness. Overassignment kills study. If the teacher does all the work there is no necessity for the pupil's labor. Nothing is left for him to dig out of the text or the problem. There is no challenge.

Economy should be the teacher's aim. The commonest and most fatal error of the teacher is to over-assign. It is at once the most tempting and most pernicious fault that afflicts the teaching profession. Most of the difficulties that beset the teacher may be traced to faulty assignment. Supervisors are faced with the problem of the talking, lecturing, scolding teacher. And yet the teacher is tempted to indulge in excessive talking by the very routine which supervisors impose. The formal seating arrangement of the modern classroom, with the teacher on some sort of rostrum and the pupils in the "audience" attitude and apparently ready to listen, lures the teacher into talking. So many teachers suffer total recall! Listening becomes a virtue. Quiet and quiescence are imposed upon the pupil. But this isn't teaching. Teaching means a pupil-teacher-partnership;¹ it means contribution by both; it means freedom of action; it means pupil-self-activity in study and assignment.

The attention of the reader is called to the fact that the word *assignment* as used in this book has a very technical meaning. It does not mean the "giving out" of a lesson. It has the meaning that Bagley² gives it. Anything that is said or done (1) to *check study* or, (2) to *make study possible* is an "assignment" activity. The "assignment" is free for pupil and teacher alike; whatever talking the teacher must do is done here, and the "talking pupil" gets his chance here also. Whatever talking he does is his

¹ See Hurt, Huber W., *Self Help in Teaching*. Macmillan 1921.

² Bagley, *Classroom Management*. Macmillan, 1907.

“recitation,” as is also any written or graphic or concrete result of study he shows. In other words, the assignment is the clearing-house for the study.

Let the teacher discard the alluring lecture method and the formal recitation which is its corollary. With study as the focal point of the aim of the classroom routine, the teacher will do in the assignment only so much as will *make the study possible* and impelling for the pupil. The teacher will establish a study atmosphere in the classroom and build up study-mindedness in the pupils. He will habituate them to searching out their own material from the available sources.

To establish the “challenge” effectively, the teacher will discover *for* or *with* the pupils’ *organization* points in the subject which he will lead the pupils to use. He will accustom them to good habits of study and to devices in arrangement and classification of subject-matter to the end that emphasis upon the “assignment” in formal terms may be gradually diminished. In other words, the greater the teacher’s skill the less he will *apparently* have to do and say, and the more the pupil will do for himself. *One might say that the effectiveness of the teacher is measured by what he does not do, or does not seem to have to do. Teaching power is measured by what the pupils can do for themselves.*

Teaching *power* is measured by the efficiency of study; teaching *art* functions in the assignment through a give-and-take process with the pupil. It is evident that the smaller the number of pupils

participating in the assignment the greater the share of each in the activity; the less the formality the greater the freedom. Therefore the assignment in a Group-Study Plan class is conducted with a group of pupils *standing* about the teacher in an informal manner and discussing the problem of the hour. This standing and proximity are required in a group-room because all the other pupils are engaged in study of their own individual problems and must not be disturbed or distracted. Freedom of discussion, or of question and answer, in the assignment group is encouraged by its very position and form. The teacher is one of the members of the group as long as there is an assignment going on—that is, as long as he is needed in the group. If the group is quite homogeneous, all its members will be ready for the same challenge, and the assignment for them will be adjusted accordingly. As soon as the pupils of this group are ready for their study, they will return to their seats to do that, or at least to begin it, depending upon whether or not the assignment began at the beginning of the period or toward the middle or end.

After the first group grips the challenge and begins the search, the teacher is at liberty to start the assignment work with another group. This may be done in any one of several ways. The first group is working under its own power. The teacher is now free to give undivided attention to the group that has been studying, and is, in fact, continuing to study. They are at work with text-books and note-

books. The teacher's first interest with them takes the form of a *check*. Possibly the teacher moves from desk to desk to observe the progress of the work, checking and commenting with individual pupils. Those will be discovered who need help. They are called together in the corner of the room for conference and consultation. Common difficulties will be cleared up and ways provided for further pursuit. Pupils of this sub-group return to their places for continuance of their study, leaving the teacher free again to check others and to help other sub-groups or even individuals. It will be noted that our plan is to *keep the study going*. By grouping the pupils according to their needs we have avoided the pitfall of indifference, and by keeping the groups small all have profited through unity of attention and interest. No pupil has been kept waiting because of the stupidity or carelessness of his classmates. Each falls into the group in which he can work best. All the members of any group attack each problem whole-heartedly because the assignment is immediate and adjusted to individual needs. The room is bound to be a busy place; nobody is in a *listening* attitude. There is industry in the study group or groups and quiet discussion in the assignment group. These objectives may be attained by a co-operative drive for mastery and understanding. Boys and girls will rise to their estate in a school in which they have a definite responsibility for the success of a dynamic programme.

The reader will have noticed that already our class

is being broken into small groups, sub-groups of the two main groups. This fluid condition is to be commended because through it the teacher keeps those pupils studying who can study, keeps those working who can work, and devotes himself to those who need his directing genius. At the beginning of a new unit of work the attention of the entire group may be arrested. Even then assignment can "carry-over" for some pupils. These, profiting by previous training, may be able to undertake the new work with little or none of the teacher's help.

It will be seen that the teacher seems to spend the day in assignment work; that is, in keeping the study functioning and checking its results. As long as a pupil can continue studying he does not need the teacher, who learns to *leave the pupil alone*. In fact he has to do it, because he is busy enough with those who do need him. The plan in action means that the Group-Study Plan works out so as to systematize the alternations of the teaching-learning process.

Incidentally, the teacher may find times when there is no group in immediate need of attention in presentation or clearing up. He is free to move about the room, checking individually and noting difficulties that the assignment has not made clear. There will be times when he may find that only one pupil has failed to get the point. His failure becoming manifest in the check, this single individual may have the teacher's attention in an individual assignment without robbing others. All are busy at their

tasks and the teacher is free to assist in an unobtrusive manner the particular pupil needing assistance.

The procedure makes for economy in teacher-energy. We know of no other way quite so effective in providing for economy in the classroom. A general assignment to an entire class cannot be economical because it cannot be adapted to the needs of all. Problem cases, retarded through absence, through bad teaching, through slowness of comprehension, through "discipline" difficulties, or new admissions from other schools or other classes, or especially bright children—the cases that are out of the routine—can be reached only through some system of grouping in class organization. Since economy demands that they be handled without loss to the others, the organization of the class work must be on such a basis that these pupils may be free to work at their own pace, and that the teacher may be free to direct them when they need assistance.

The freedom of the teacher is vital to economy. The energy of the teacher is his capital, his stock-in-trade. Teachers will admit that the energy-consuming factors in the classroom are the problem cases: the indifferent pupil, the "slow" pupil, the absentee, the discipline case. "Give me a perfectly graded class," says a teacher, "and I won't need the Group-Study Plan!" Granted, for the sake of argument. Given a perfectly graded class, anybody could teach. But there is no such thing as a perfectly graded class. For this reason we have what we call

the art of teaching. Teacher-energy is wasted largely because of faulty class organization. In a unit class the teacher's energy is wasted through trying to do the impossible; the pupils are not "perfectly graded." Hence every attempt to attack the problem as though they were is doomed to partial, if not total failure. The extremes of ability are always present in the teacher's consciousness. He directs the lesson to one extreme and thereby deprives the other of a vital challenge. As a matter of fact collective teaching is aimed at the mythical "average" pupil.¹ Gradually teachers are becoming aware of the waste involved in mass instruction. The hopeful aspect of the situation is suggested in the interest manifested in experimentation. Individual instruction and the various forms of *directing study* in the name of "socialization" are clear evidence of a new general technic in the making.

The Group-Study Plan sets the teacher free in another direction also. There is a release from the compelling force that has made him try to interest all in a presentation fitted only for a few; and there is a change of attitude on the pupil's part. The problem pupil no longer looks upon himself as such. The retarded pupil finds himself grouped with others having comparable difficulties. He discovers that he is not so stupid as he thought. He realizes that others have like troubles. He begins to enjoy a sense of progress and achievement. The pleasure resulting

¹ See Faunce, W. H. P., "Democracy in Education," *N. E. A. Journ.*, April, 1928, v. XVII.

from his own success alters his outlook. He does not remain long a problem case. *The realizable chance to move up into a higher group makes its appeal.* Special assistance rendered at opportune times makes possible this change of attitude. The indifferent pupil, who has probably become such through boredom, takes a new lease of life when he discovers that he is getting a chance to *do something* instead of appearing to listen to the teacher all day. All these problem pupils change their attitude *when they have work to do that they can do*, and they are quite willing to set the teacher free in order that they may enter at once upon the challenge.

It will be remembered that the "brilliant" pupil is also a real problem. Mass teaching of an entire class brings little, if any, challenge to these clever boys and girls. Differentiation under the Group-Study Plan affords an opportunity for every member of the class to work up to capacity in a joyous, worth-while endeavor.

The enervating task of holding the attention of a class is no longer exacted. The annoying problems of school management such as keeping pupils in order, going through the motions, hearing lessons recited, gradually disappear. The urge to give whole-hearted attention to the work in hand begins to develop in the group whose challenge is clear and gripping. All are profitably engaging their powers. There is the hum of industry in this "new" school. The new teacher is a director now and employs his genius in a new realization. He is not "keeping order." He

is not indulging in excessive explanation and questions. There is no order for the sake of order in this new adventure.

Habituation to self-activity (the key-note of the Group-Study Plan) results in economy, and is made possible by the organization of a class period which provides for the alternations that the teaching-learning process demands. These alternations are easily systematized so that the pupil always finds himself a participant in some class activity. If he is not occupied with the study of a problem he is busy with the teacher in assignment. He soon learns that his main duty is *study*. He realizes quickly that it is upon the results of his *study* that he progresses; checking by the teacher brings that fact home to him early and often. Also, he sees the futility of attempting to participate in an assignment for which he is unprepared, because he discovers that the others are ready to discuss while he can take no part. And he feels this more keenly as a member of a small group than he formerly did as one of a large class. Accomplishment is in the air, and he does not willingly submit to being left out.

The procedure goes deeper and farther. The assignment, being made with a small group, is effective because of the approximate homogeneity of the group; it strikes home. Ideally, no individual escapes its influence. Every individual acquires a feeling of *power to study*. The assignment brings out every essential feature of the topic, reveals old knowledge, links things together, establishes contact points.

That is, the assignment establishes an apperceptive basis through informal discussion. Next, the assignment indicates to the pupil what the new matter is like, and finally shows him how he should go about making it his own. It indicates how the matter should be organized by the learner, how the main and subordinate points are related to each other, and the whole to the entire subject; in short, it shows *how the studying is to be done*. Hence the pupil, as a result of an assignment fitted to his needs, feels a confidence that grows out of understanding, and willingly undertakes the study which follows. The informality and flexibility of the grouping have aided in another very important manner also. Released from the constraint and formality of the classroom seat, the pupil has felt more at ease, and this new freedom has encouraged him to talk freely with the teacher and with his fellows in the assignment.

Habituation to organization offers further aid in assignment through the discovery by the pupil that if he can study one topic he can study another in very much the same way. For example, after he has participated in an assignment in Biology on Arthropods which has indicated how the classifications are worked out, he can study another order and work it out on the same lines; one lesson in Geography on drainage areas having been assigned, the pupil works out the others himself, following the same type of organization. Hence, in a properly organized class period, the principles of the assignment carry over. The possibilities for economy in this venture



are intriguing. Any group, once started on an organized plan of study of this type, can go as far or as deeply into the subject as it will. Each individual can go at his own pace with the unit of work laid. There is no upper limit set arbitrarily by a restrictive "lesson" for all alike.

In the practical working of the group assignment the habituation to organization is suggested by a chart outline of the points being covered. This works out on an oak-tag sheet about 36 inches wide by 48 inches long, hung against the wall within easy reach of teacher and pupils. As the aim of the challenge is determined and the points on the topic are disclosed, they are written upon the sheet with black or colored crayon under heads and subheads. When the assignment is completed, the sheet (chart) may remain in view of the pupils when they resume their seats with note-books and text-books for study. The chart is far better than the blackboard for this purpose for several reasons: (1) The blackboards must be kept free for study purposes; (2) the chart is movable and can be hung in whatever part of the room the group needs it, and (3) the chart has future usability for review or drill purposes. The making and the use of these charts are a very important factor in the development, stimulation and guidance of the classroom activities. The assignment chart naturally becomes a study chart. It is used in both phases of the challenge, replacing the teacher's talk and questioning.

A natural development of these incidental assign-

ment charts introduces a sort of permanency in some of them. In English, in the Social Sciences, in the Physical Sciences, in foreign language, a chart which grows out of an assignment may prove to be a guideline insuring the carry-over previously referred to. These become permanent "study charts," and encourage the pupil to rely on himself, with the result that the teacher is agreeably surprised to find that he can do much more than it was believed he could.

It is a natural step to the "indeterminate challenge" and the development of the "work spirit." We have given to the pupil, through the first assignment chart, an idea of thought organization, of content arrangement. Now if we can learn to *let him alone* he will work out the rest of the task for himself. And all without difficulties of "discipline" because the pupil will not only sustain himself through his own interest in a full task, but will govern himself throughout it. " . . . One must be a confirmed pessimist, or an uncompromising absolutist, if one fails to appreciate in boys and girls the possibilities for responsible self-guidance and initiative in carrying forward the legitimate work of the school."¹

Our assignments as formal phases of the challenge become of diminishing importance as we achieve the self-directing work-spirit in the pupil. And in discussing the capacity for self-direction and self-governing power of the pupil in the assignment, this is a good place to call attention to the development of pupil-leadership. Any small group, in a dis-

¹ Miller, H. L., *Directing Study*, p. 217.

cussion of a topic, may reach a point where the teacher may quietly resign his leadership and leave the matter to them. Group leaders are readily developed who take a sort of chairmanship of the group, now in committee form, and carry the work forward for a short time without the teacher being in evidence for the nonce. This achievement is a feature of the group class which creates democracy in the schoolroom, a consummation important beyond the subject-matter itself in that it habituates to social co-operation under leaders who have earned their places.

The ideal toward which the whole procedure points is a social ideal. No one will command merely for the sake of commanding; no one will obey merely for the sake of obedience. The challenge is to find a way of *making the task the pupils' task*. It is so easy to superimpose the task upon the minds of docile little slaves, and then operate as taskmasters to see that the work is done. The new school has outgrown that. The "check" step in the challenge takes care of it by beginning with the pupil's own check upon his own work.¹ The social ideal will never be attained on this planet by perpetuating the practices of a feudal system. We are sensing in this adventure the democratic trail. The prospect has only begun up the canyon sign-posted "democracy in education," on the frontiers of which we are expecting to discover and create capacity for self-direction and to realize the individual who can be trusted with power.

¹ See Chapter VI.

The new prospecting party will be guided by a forward-looking philosophy. The guide-line will be: "*You are what you have capacity to become.*" "What you become will continue to be the co-operative result of your capacity and the conditioning environment." The new school takes the first and makes the last.

A TYPICAL ASSIGNMENT—DISCUSSION

(An Experiment in Expression)

Seventh Year

PUPILS FROM "FOREIGN" HOMES

THE INDIVIDUAL INTEREST

MOTIVATION.—Desire to interest the teacher personally in some experience, avocation, community interest, or neighborhood curiosity. How the subjects were selected.

1. Volunteered:

"Would you like to hear about my Sunday trip to the Brooklyn Navy Yard? My father is an ammunition worker. He took me."

"I went to Russia with my father. I can remember some of the trip. My father will help me." (Boy took home *Geographical Magazine* on "Young Russia"—father much interested in reconstructing trip.)

"I was in a California lumber-camp. Would you like to hear about lumbering?" "No, I wouldn't care to hear about lumbering." "Yes, if *you're* in the story—all right, but no lumbering." Crestfallen: "But I know how they get a big tree down."

"Once, I wrote for booklets on planting. Here they are." "Why?" "I'm interested in farming." "Going to be a farmer?" "I am a farmer at my grandmother's in

Gloversville every summer. Shall I tell you about it?"
 "I had a nice vacation. Shall I write about it?"

2. Skilful ignorance on part of teacher:

Teacher: "Can one sell old newspapers?" This brought encyclopædic information on "Junk Shops"—two of our class having "Junk" in the family. Information was exact and the two boys checked each other on the process. Result: oral composition—graphic supplements.

"Where do you boys go after school? I never see any of you when I go home."

1. The library clubs—an excursion to the Aquarium.
2. The street playground under Park Avenue tunnel.
3. Street soccer.

3. Other boys ask or suggest interests where boys are slow to offer:

"Say, come down to the docks when the clam-boat comes in—I'll go with you this afternoon."

"They sell clothes, second-hand, around the gas-tanks."

A boy said: "I'll make up a story about a cloak as Grimm or Anderson would." (Brought his model, worked with boys on his story—fine suggestions.)

4. The teacher catches at straws in other lessons: casual reference:

Boy: "I was riding a horse——"

Teacher: "You can't ride."

Boy: "Yes, ma'am. From the blacksmith's—I take the horses back to the boss."

This brought the neighborhood in. Provided with the most backward foreign boy as a companion, armed with suggestive questions, the two visited the smith. Notable results.

"He ate my pigeon."

"Pigeon pie is good."

"But it was a *tumbler*, my *best* pigeon."

"Do you keep pigeons?" "Who keeps pigeons?"
Three boys confess to a great interest in this.

5. The hopeless cases, apathetic, or "gamins": one boy absent forty days. Results:

"Forty Days of Truancy."

"An Adventure with a Truant-Officer."

"An Imaginary Vacation,"

due to six days of truancy including wild, improbable tales of a simple life—used spelling words *admirably*.

The only boy who doesn't *like* to write never talks either: every boy suggested a topic but he only smiled. One boy said: "Say, draw it, if you can't say it." Finally, I asked what his father did "Bakes." "For a boss." "From 4 to 7 in the morning" "Bakes bread for the *ladies*" (Sic). That started the story because the teacher couldn't understand. Class furnished sketches of baker's ovens. Boy learned how to talk, write, and draw. Very cunning and babyish expression.

6. The most discouraging of all: the "smartest" boy in the class offered to thrill the teacher with "Electricity," "General Science," "Great Inventions," but we finally compromised on "Railroads."

Several boys changed their topics after an oral lesson because they really wanted to interest the teacher, and were jealous of the "City Blacksmith" and "My Uncle's Junk-Shop." These boys wrote then, on:

"My Club." Arrow A. A. at Union Settlement.

"Boy Scouts," (3)

"St. Ambrose Cadets,"

from their own view-point, not as a theme.

"My Father's Story," a political refugee; and two boys told how Hebrew school differs from public school.

TITLES.—Some care was exercised in choosing appropriate titles. Several were offered in home note-book and discussed in class:

- "A Trip to the Navy-Yard."
- "Russia Revisited."
- "My Stay in a California Lumber-Camp."
- "Farming as an Avocation."
- "Summer in the Mountains."
- "Junk-Shops."
- "Junk as Business."
- "The Aquarium Visited."
- "Street Playgrounds."
- "Street Soccer."
- "A Visit to the Docks."
- "The Russian Cloak." A Story.
- "A City Blacksmith."
- "Horses' Hoofs."
- "Keeping Pigeons."
- "Pigeons for Pleasure."
- "Forty Days of Truancy." A Story.
- "A Truant's Dream." A Story.
- "My Father's Job."
- "Railroads."
- "My Club."
- "Boy Scouts."
- "St. Ambrose Cadets."
- "My Military Training." *Junior National Guards.*
- "My Father's Story."
- "Hebrew School."
- "An Adventure in Truancy." A Story.

METHOD.—Every possible activity employed, each one was, in turn, questioner and teacher, illustrator and critic—yet the spirit was helpful and interruptions were for speed, not discourtesy.

1. *Oral*: Two kinds—quick-response interruptions, give and take—all group ask to tell—boy is centre however. Boy and teacher or two boys and teacher "deliver the goods" if they can sustain interest in their talk—some prefer to cast a written draft at home.

2. Written.

1. Note-books: go out armed with questions—set down facts—no order.
2. From oral—while in group—outline talk in paragraph individual outline: grouping subtopics (on drawing-paper in pencil) individual outline.
3. Each boy required to throw one sentence for every paragraph into question form for emphasis. Rewrite separately.

Application of rhetorical aim:

Aim 1. Unity in paragraph—attained through outlining oral composition.

Aim 2. Emphasis through question—attained through familiarity by use.

Monday, we transcribe a paragraph showing above aims.

Teacher dictates it.

Teacher uses it in every possible connection throughout the day, asking for—and himself using—rhetorical questions on Monday, Tuesday, Wednesday, and Thursday. By Thursday all were able to distinguish questions as:

1. Questions desiring facts of information.
2. Questions for rhetorical effect { Emphasis.
Variety.

This became a game and was neither conscious drill nor insulting monotony. We looked for such questions in *Sohrab and Rustum* and *Rip Van Winkle*. We modelled ours on them.

GRAPHIC:

Drawings and diagrams of military commands.

Club-room chevrons.

Fishes.

Horse's hoof.

OBJECTIVE:

Boys brought nail and horseshoe and pictures.

Agricultural reports and pictures.

“Junk” to sort; a shell cap.

CHAPTER IV

MEETING THE CHALLENGE

THE STUDY SPIRIT AWAKE

However teaching may be defined, its results are measurable in terms of the pupil's accomplishment. It is being realized by the teaching profession that this accomplishment is best measured, not in factual results, but more effectually in terms of ability—ability to do, to undertake, to seek new fields, to think. Everywhere teachers are beginning to look with an appraising eye into courses of study, into content of subject-matter; and into the personality of the pupil himself. And they are coming more and more to agreement upon the fact that the important thing in the school is not so much what we teach as how we teach and whom we teach. The focus is shifting toward the technic and the pupil.

Let us again examine the teaching-learning process. The aim of the teacher's teaching is the pupil's learning, and that learning is defined in terms of power. The question is, then, how does the pupil learn? Does he learn through vividness of presentation? Is the teacher the dominant factor in the process? Or is the subject? Or is it the pupil? In the past the teacher and the subject, presentation and formal drill have had full sway. The modern note strikes through the pupil.

The pupil is his own best teacher. This fact is axiomatic in the "new" teaching, and is the basis of the "new" technic. Self-activity is no longer the theme of the theorist; it is the key-note of the modern school, the fundamental of its method and its classroom management.

In the "new" school the pupil is put to work, and the technic of the teaching is centred upon him. The pupil must have scope, he must go at his own best pace, neither retarded by the stupidity of one nor hurried by the brilliancy of another. Individual needs will be provided for, individual opportunity will be afforded. And new skills will be demanded of the teacher so that pupil-self-activity may function; new skills in *assignment*, new skills in *study*, new skills in the *survey of accomplishment*.

As the pupil's accomplishment comes through his own effort, upon what shall that effort be expended? His power grows through development of his ability to *study*, and upon this ability will depend his success. It is obvious then, that the classroom activities will evolve from and revolve around the *study* by the pupil, and that the teacher must modify and modernize his method to that end.

Study is intensive application of mentality toward the solution of a problem. It is entirely self-active. The pupil studies *alone*; while he is studying the teacher has nothing to do with him and must *leave him alone* to work out his own salvation. The study is a challenge to the pupil; it can only be retarded by the interference of the teacher, hence the tech-

nic that is suggested in this book, a technic that seeks purposefully the elimination of the teacher from the study phase of the lesson.

The teaching-learning process is a process of alternations. If the pupil knew what and how to study, teaching and the teacher would be unnecessary. As the pupil does not know these things the alternations must function: (1) The *study* must be made possible, must be motivated, must be linked with old knowledge; (2) the *study* must be done by the pupil; (3) the results of the *study-effort* must be checked. These are the alternations that make the lesson-challenge, and that are the elements of the teaching-learning process. All method emerges out of them.

The first of the alternations, *the step that makes the study possible*, is the assignment. The assignment makes the pupil acquainted with his problem, brings pupil and teacher together, and places the pupil in relation to the study task.

The second alternation, and the most important one, is the pupil's own, the *study*. Study is first a process of *analysis*—difficulties tend to lessen when isolated, when the whole is broken into its parts. Study is next a process of *organization*, of seeking relations. Then comes *repetition* for fixation; and *concentration* and *inhibition* for economy; with a final step, a *self-survey* or *check* for realization. First the pupil must be led to believe these things, and we have the—

PUPILS' CREED

I believe:

1. That when I study properly I am my own best teacher.
2. That, like the builder, I need a plan.
3. That, like the spider, I must persevere step by step.
4. That my attention must not wander until my task is done.
5. That repetition fixes knowledge in my mind.
6. That my work is not finished until I have checked it.
7. That when I teach another my reward is greatest.

This creed is made into a chart and hangs on the wall of every classroom; it is copied into every pupil's note-book and is memorized. Then it is supplemented by its little brother—

THE HOW-TO-STUDY CHART

Study depends upon:

1. *Organization*

I must arrange my subject-matter in order under topics and sub-topics.

2. *Repetition*

An ounce of self-drill is worth a pound of instruction.

3. *Concentration*

All my time is wasted unless I put my whole mind on my work.

4. *Creativeness*

An ounce of creativeness is worth a ton of absorption.

And, best of all, we summarize our study necessities in the—

STUDY STEPS

1. *I state my problem*
I write my AIM.
2. *I analyze my problem*
The seven sticks break easily one by one.
3. *I plan my work*
I emulate the spider.
4. *I work my plan*
With care and accuracy.
5. *I check my results*
They must satisfy me before the teacher sees them.

These are our first "study charts," and they are the property of every pupil; they hang on every wall, they are in every note-book, and they are applied in every period of the school day, and in every subject of the curriculum without exception.

After a little practice the pupil discovers that he does not prosper through worrying about the answer or through striving for short cuts, but that he does succeed when he goes through his study-steps and works out in his note-book slowly and accurately each phase of the process as he accomplishes it. He is never urged to hurry, because growth is a slow process at best—and there is no need for hurry because the economy of the Group-Study Plan eliminates waste.

The note-book is an essential tool of the learner. Its pages reveal the progress of each day and summarize the attack in every period. A sample of a simple page-organization is given below. The prob-

lem is a History challenge revolving about a few outstanding personalities of the period under observation. The material is searched out by the pupil in his text-books and reference books, and the summary in the note-books takes some such form as this:

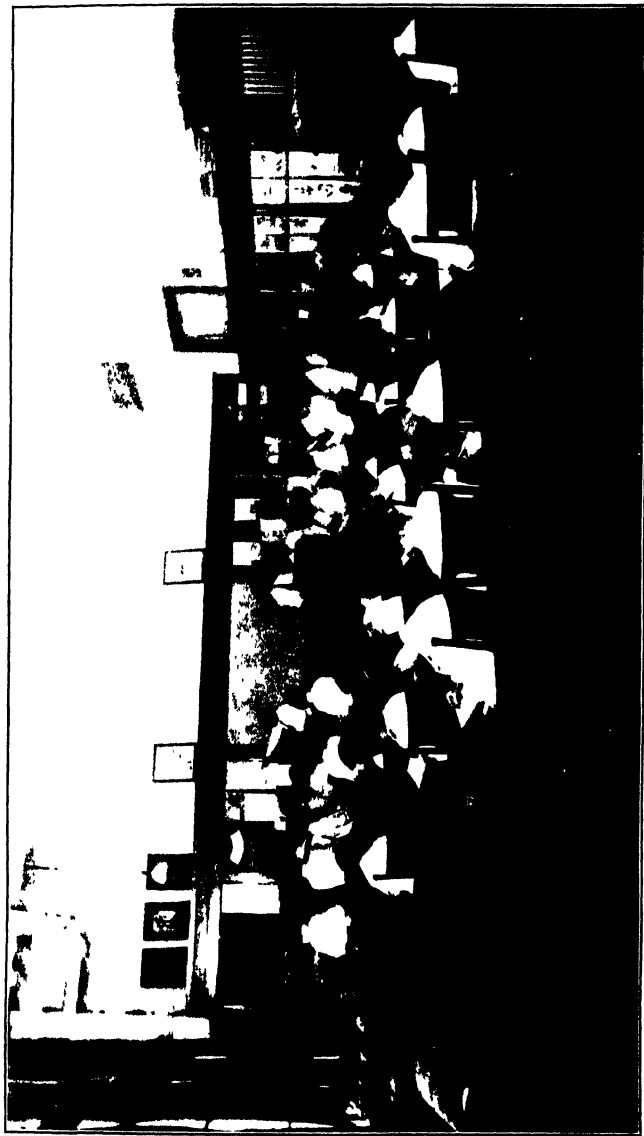
AIM PERSONALITIES			
WHO	WHAT DID HE DO?	WHEN?	RESULT
1. Saladin 2. Richard 3. John 4. Peter the Hermit 5. Philip			

The aim of our discussion is to create the work spirit and to develop study-mindedness in the pupil. We have worked out a method of the approach to the problem that has clarified his concepts and organized his methods of attack. Study is not viewed any longer as a tremendously complex process. A large factor in the procedure is to be able to begin at some tangible point. Frequently study begins by laying hold of a pen and a straight-edge or the like. Teaching ought to be based on simplicity and common sense and then refined through scientific method. Reduced to its simplest terms, something is set out as a challenge involving the pursuit pattern. The natural thing for the teacher to do is to say to the pupil: "Here is what we want; let us look at it together." In the discussion (assignment), the teacher uses his skill to draw from the pupil, by

adroit questions, what data the learner already has available; he then indicates where new matter may be found, sets a problem if you like, and from then on *leaves the pupil alone*. The procedure includes the *preparation* and the *contribution*, the "assignment" and the "study." But the operation is not complete until the pupil has done the work and surveyed it.

The next step is to bring the results of his research or his effort to the teacher for examination, criticism, praise, or correction. This step is the *check*. If the accomplishment has been satisfactory the next topic can be discussed *with the check as its apperceptive basis*. So the cycle goes: (1) Making the study possible; (2) accomplishing the study; (3) checking the study. It applies to every activity, from hammering nails in the wood-shop and turning handsprings in the gymnasium and crawling in the tank, to the nebular hypothesis and the seven liberal arts.

But the important thing for the teacher to know is to *leave the pupil alone* to work out his own problem. There are always other pupils needing the teacher's direction. The pupil at work does not need any of his attention during the study activity. Not until the pupil has achieved a real mastery of a unit of work (a challenge or contract) does the teacher again become a helpful agent in the learning process. (By way of parenthesis, it is pertinent to remark that the most serious obstacle in the realization of the new procedure is the "stereotype" which supervisors and administrators have acquired. They expect to find a teacher conducting the formal recitation.



A ninth-year Art class in three main groups. Two groups are with leaders; the teacher is free to check the work of the third group as

It is difficult for them to appraise the new class period.)

The study-group is the crux of the classroom situation. If the "assignment" has been correct; if it has been a real *invitation* to the challenge, fully adequate and yet not overdone; if the discussion in it has been enlightening; if it has been well-organized and apperceptively based; the pupils *can* study. And they *will* study. There seems to be an idea among teachers that pupils cannot be left alone; that there will be disorder and waste of time in the study-groups while the teacher's attention is engaged with the other groups. This is a mistaken notion. It must not be forgotten that habituation is strong; that the pupils have a training behind them through the use of the Group-Study Plan methods in every period of the day; that a routine is established. They become study-minded, and *want to do* the work. Human nature is always working for us and not against us. We are taking advantage of the child's natural desire to do something. Regardless of the age of the pupil or of his type, all are alike in one respect—the desire to achieve. It is the great fault of the "old" school that it does not take this fact into consideration.

We are contending here for a philosophy of life which needs broadcasting in these tragic days of pedagogical pessimism. "*You are what you have capacity to become.*" "*Man is not what he was. Man includes what he was, and something more.*" "*Man is not until he becomes.*" "*He began to be what he was*

to become." "You are the co-operative result of your capacity and your conditioning environment." "Nature forms habits when it gets organisms to form them with." These are sentences which we might urge the American school administrator and teacher to contemplate.

Other things are forgotten by those who worry lest the plan will not work. It has worked in four New York schools situated in widely separated parts of the city. It has worked with all types of pupils and in all grades from the first primary year through the Junior High School. The more difficult the problem as regards the type of pupil the more effective it has been; the greater the retardation, no matter what the cause of that retardation, the greater the improvement. The secret lies in the factors of the group-study idea: (1) Recognition of pupil-individuality, of individual needs; (2) the breaking down of the formality of the "lesson-hearing" school; (3) the formation of a pupil-teacher partnership through the ease and informality of the discussion groups; (4) the element of success in study following the discussion; (5) the confidence in group and individual responsibility which the teacher cultivates. The mere fact that groups are provided for opens the door to a new world for both pupil and teacher. To quote from *The Self-Directed School*: "If teachers prefer to be guided by *what ought to be*, rather than by *what is*, new directions will begin to appear in their horizons. . . . We all prize the qualities of initiative, accuracy, mastery, creativeness, co-opera-

tiveness. Does our classroom practice . . . develop these qualities? Are we casting about in courageous experimentation to find a way by which inquiring and creative minds may be developed?"¹

The procedure in group-study follows a more or less unified routine. The "study chart" hangs on the wall as a guide and reminder—possibly the very chart that was created in the assignment discussion. This chart was then topically developed and the topical method will be followed in the study. As an example of a study-organization chart the following is given:

INVENTIONS			
THING INVENTED	BY WHOM?	WHEN?	ITS VALUE

The interested teacher will modify this form, or expand it to suit his needs. The main point is the idea of *organization*. The pupil learns to work out his problem in an organized way, and he is free to expand his details to whatever degree he will.

This form develops and crystallizes in the *assignment-discussion*, and is copied in the note-books in the *study* activity and filled in by the pupil as he searches out his information. It remains, of course, as a permanent record of the research and is valu-

¹ Miller and Hargreaves, *The Self-Directed School*, p. 63.

able as review matter at any later time. The check on it will take several forms: an inspection by the teacher after the pupil himself has checked it, an oral "recitation" of its contents from memory, or a test in writing on the pupil's ability to duplicate it without help—none of these requiring use of the "question and answer" method.

Suggestive forms like this carry over into other topics, and the student soon acquires the habit of "heading up" his study note-book work and outlining his results. It need not be said that he uses these note-book forms as guides to full discussion when called upon. In the other Social Sciences the same device is useful. In Geography, chart headings may be agreed upon for, let us say, the study of river systems and drainage, and the information searched out is summarized:

RIVERS					
NAME	SOURCE	DIRECTION OF FLOW	MOUTH	IMPORTANCE	LENGTH

Naturally, charts of this character carry over easily. The pupil who has worked out the rivers of Europe is ready to undertake the rivers of Asia; after working out "inventions" he has ideas on the problems of "discovery" and "exploration." The suggestion is offered here in its simplest form. Every

teacher will modify and develop it. The charts may be criticised on account of their formality; but the practical teacher will remember that they are formed in and grow out of the assignment-discussion which preceded the study, becoming a record of the subject-matter discussed and later studied. They are *not made for the pupil by the teacher*; they are natural headings that develop, with the detail to be filled in by the pupil in his study note-book. Their value far exceeds their weakness. They *are* formal; they give form to the result and indicate some systematic method of work—a very good thing in this day and generation. They are given as instances of system acting to promote originality by freeing the mind for new enterprises. The fact should also be borne in mind that there is much wholesome informality in the *group-study room*. Life in general outside of automatic industrial work is not rigidly prescribed. The school may very properly insist upon organized modes of work as training in mental orderliness while recognizing the danger of setting up stereotypes which are blindly accepted and followed. We recognize the difficulties in any formal plan. The emancipated mind will use habituation to promote creative thinking. One may acquire a decidedly formal “Spencerian” hand in penmanship, and yet be free to use the most fantastic flourishes of pen to create significant writing—even readable poetry.

Some study charts are found useful in many new situations; their carry-over value allows their use as general guide-lines as it were. Subjects such as Gram-

mar, Composition, the Social and the Physical Sciences, the Foreign Languages lend themselves to a progressive, cumulative treatment. Fundamental forms of attack for organization and memory will be carried through the successive grades. Permanent charts are used: (1) As guide-lines in type-studies, thus obviating "assignments," and questions-and-answers in the "recitation"; (2) to guide reviews; (3) to summarize for drill, or test. They become economy devices applicable in many directions.

In language study much formal work must be done. This work is highly profitable from a training standpoint. By intelligent use of *form charts* pupils may acquire a sense of completeness of analysis of the thing in hand. In the grammatical analysis of a sentence, for example, after the pupil has made a satisfactory definition for "subject," "predicate," and "complement," he finds use for a routine analysis of his sentence, and applies a formal device to a formal challenge:

Sentence: IN MY HASTE I MADE SLOW
PROGRESS

Seven steps to find the elements:

- | | |
|---|---|
| 1. Predicate verb . . . MADE | |
| 2. Who made? | 5. Made what? |
| 3. <i>I</i> made | 6. Made " <i>progress</i> " |
| 4. Therefore " <i>I</i> " is
subject | 7. Therefore " <i>progress</i> "
is the complement |

A general guide-line chart for the study of a challenge in literature:

A STUDY CHART FOR CONTENT
READING

I. Aims:

1. *To get the writer's meaning* as expressed
 - a. in the story
 - b. in the descriptions
 - c. in the development of character
 2. *To appreciate the beauty* of the selection as in:
 - d. Form . . . prose, poetry
rhyme . . . rhythm . . . scansion
 - e. Figures of speech
—name and analyze each as recognized
 - f. Allusions
look these up, or note them and ask the teacher's help later
 3. *To select parts that deserve oral rendition*
 - g. enter these in note-book by writing first and last lines
 - h. memorize partly
 4. *To imagine characters clearly*
 - i. write a description of each
 - j. make a drawing
 - k. cut out pictures from magazines, etc., and paste in note-book
 5. *To increase vocabulary*
 - l. enter valuable new words in note-book
 - m. enter meanings from dictionary . . . thesaurus
 - n. consult fellow pupils in whispers
- II. What effect has the selection upon you? Spiritually? Mentally? Emotionally?

The professional teacher will recognize at once the value of the Content Reading Study Chart. It is intended for permanent use and hangs upon the wall of the English room; of course it finds a place in every pupil's note-book. Its use quickens the assignment which precedes its use in study and shortens the assignment period. Its habituated use builds up power and opens the door to appreciation. In practice the teacher will find that it guides to a very praiseworthy fulness of content. The English note-book becomes a storehouse of detail. The Content Reading challenge always precedes whatever Oral Reading is done, and is one of the steps in the preparation for that exercise.

Oral Reading is a challenge of another sort. The reader is reminded that every challenge entails the steps of (1) *assignment* (with its awakening of interest and its discussion); (2) *study* (marked by pupil-effort and note-book evidence), and (3) the *check*. Below is given a chart for Oral Reading which is useful in all three phases of the challenge and the victory. This is a "permanent" chart applicable to every challenge in the "subject." By Oral Reading it will be inferred we mean the oral rendition of selected parts of a masterpiece, selected to a great extent by the pupil himself (see the Study Chart for Content Reading), and intended for effective dramatic rendering. To accomplish his aim, which is to hold interest, the pupil discovers, in practice, that he must be prepared to do certain things. So he organizes his preparation and establishes a routine through the—

ORAL READING STUDY CHART

- I. Silent reading for content ¹
- II. Aim: To secure and hold the interest of an audience
- III. Steps:
 - a. to ascertain
 1. the main thought
 2. the character I represent
 3. the situation in which the character is
 4. the emotion to be expressed
 - b. what will be a fitting
 5. posture?
 6. modulation of voice?
 - c. my own suggestions for effective rendering
 - d. have I whisper-practised my pronunciation?
 - e. partly memorize

This chart is used daily in oral concert (whispered) group drill under a group leader. In the course of time every pupil becomes a competent "concert master."

As an offshoot of the Word Study Chart the pupils develop two separate individual word-lists: (1) The individual list of demons; (2) a "treasure list" of apt words and expressions acquired from reading.

These are entered in individual note-books under a form:

TREASURE LIST

APT WORD	WHERE FOUND	TIMES USED BY ME (CHECK)

¹ See *Content Reading Study Chart*.

On the study of reading see Gist, A. S., *Elementary School Supervision*, Chap. IV.

A STUDY CHART FOR FIGURES OF SPEECH

FIGURES OF SPEECH

“As idle as a painted ship upon a painted ocean”

Figure. . . . Simile

Definition. . . . A comparison of two unlike things

Why used. . . . For beauty? For emphasis? For both? Check

Analysis. . . .

A STUDY CHART FOR WORD STUDY

WORD STUDY

1. Pronounce word carefully
2. Ask yourself:
 - a. How many syllables? (Consult dictionary)
 - b. Where is the accent?
 - c. Where may the syllables be separated?
3. Pronounce again slowly
4. Spell each syllable separately
Pronounce the syllable *before* you spell it
5. Focus on the difficulty or “catch,” if any
6. Pronounce again
7. Give part of speech
8. Give meaning
9. Use it in a sentence

In accordance with the topics required, whatever has been demanded in the assignment, the pupil summarizes in some such form as the above in his note-book and is checked in accordance with it in the recitation. *The recitation may be an inspection of his notes or an oral discussion or both.* In the oral recitation the form is the skeleton upon which he hangs his talk.

A Study Chart in Foreign Language follows:

STUDY CHART IN FOREIGN LANGUAGE		
VOCABULARY		
Name the objects in the pictures handed to you		
ENGLISH	FRENCH	PICTURE NUMBER

The teacher has prepared for this study by collecting pictures clipped from magazines and pasting each on an oak-tag card. These cards, numbered, are distributed by the group leader. Other charts for guidance of study of regular and irregular verbs, for idioms, for declensions, etc., are obvious.

Typical Study Chart in Grammar:

This is a chart of the type used for the study of a particular challenge, and may or may not come into use again at a later time. It is not a permanent chart.

GRAMMAR 8B

Aim: Analysis-synthesis of Complex Sentences.

1. Adjectives. Adjective phrases and clauses.

Change the following adjectives to phrase and clause:

	PHRASE	CLAUSE
a <i>daring</i> hero a <i>thrilling</i> adventure a <i>rare</i> jewel a <i>wealthy</i> man an <i>ingenious</i> builder a <i>Chinese</i> vase a <i>clever</i> writer an <i>ancient</i> mariner a <i>romantic</i> heroine		

2. Write 6 adverbial phrases. Change them to clauses.

3. Read page 185. Do the exercises.

4. Diagram sentences 1, 2, 3.

5. Clauses inverted. Exercises 1, 2.

SELF-DIRECTED STUDY CHART

A Grammar Game

Watch my sentence grow

1. Problem.

Skeleton sentence

FIRE DESTROYED HOME

Add modifiers

A. Adjective

1. Word

2. Phrase

3. Clause

B. Adverbial

1. Word

2. Analysis.

2. Phrase

3. Clause

3. Work. A. 1. The *raging* fire destroyed the *beautiful* home.
A. 2. The fire *of raging proportions* destroyed the home *on the hill*.
A. 3. The fire *which raged all night* destroyed the house *which stood on the hill*.
B. 1. *Yesterday* the fire destroyed the home.
B. 2. *Before sunrise* the fire destroyed the home.
B. 3. *Before the sun had risen* the fire destroyed the home.
4. Survey. a. Consult your text-books by referring to the topic—
“Modifiers,” e. g., Hodge & Lee, page 169.
b. Ask yourself: “What relation has this problem to mine?”
c. Correct your own work.
d. Then consult your group-mates.
e. Lastly submit to your teacher.

APPLICATION TO COMPOSITION

- A. Refer to your chart on Rhetorical Aims in Composition.
Note Aim A. 3. *Clearness* through placing of modifiers.
- B. Read your own composition carefully to see where you have violated the following rule: “Place your modifiers as closely as possible to the words which they modify.”
- C. Indicate such an error by writing in the margin “A. 3” as per composition chart.
- D. Do the same in revising your classmates’ work.
- E. From now on read and critically listen for all errors of this type.

USE OF THE STUDY-STEPS IN ENGLISH COMPOSITION

Ninth Year

To Write a Paragraph

STEP I. *I state my problem*

I write my topic sentence

STEP II. *I analyze my problem*

- a. What is the key-word in my topic sentence?
- b. Write a series of topics that carry out the idea.

STEP III. *I plan my steps*

c. I choose my aim

1. *Clearness* through.

- unity
- choice of words
- placing of modifiers

2. *Emphasis* through

- inversion
- the question
- repetition
- climax
- direct quotation
- exclamation

d. I choose my method of developing the paragraph

By Particulars

Instances

Mnemonic

PICER

Comparison or contrast

Effects

Reasons

e. Make sentences from topics listed in IIb

f. Arrange sentences in best possible order

- time
- place
- importance

g. What is the best position for topic sentence?

h. Write paragraph

i. Underline parts that show carrying out of aim

j. Underline topic sentence

STEP IV. *I survey my results . . . The Check*

k. Have I carried out my aim?

l. Does each sentence help to carry out the idea?

m. Is each sentence grammatically correct?

n. Can I make any sentence stronger, clearer?

o. Consult books, group-mates, leader, teacher

CHART FOR SELF-DIRECTED STUDY

USE OF THE STUDY-STEPS IN
PREPARATION OF A THEME*Ninth Year*STEP I. *I State My Problem*

I write my topic sentence

STEP II. *I Analyze My Problem*

a. What must I know to discuss the topic?

b. Where shall I find my material?

c. How many related topics are included?

d. How many topic sentences shall I need?

e. How many paragraphs shall I use?

STEP III. *I Plan My Steps*

f. Consult reference and text-books—make notes

g. Plan paragraph in accordance with Paragraph chart

STEP IV. *I Work My Plan*

h. Write my theme

STEP V. *I Survey My Result. . . . The Check*

i. Is each paragraph necessary to the development?

j. Has each paragraph unity?

k. Can I make any improvement in wording or arrangement?

l. Have I consulted the best sources?

m. Is my information accurate?

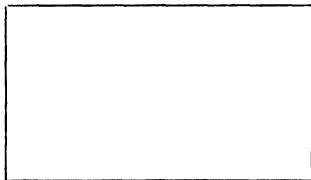
STUDY CHART FOR ORGANIZATION OF
BIOGRAPHICAL AND GEOGRAPHICAL
BACKGROUNDS IN LITERATURE

For the "first reading" it guides the teacher.

For the "second reading" it guides the pupil's research.

For the "third reading" it guides self-expression—oral,
written, graphic.

A LITERARY MASTERPIECE



AUTHOR'S PORTRAIT

- I. Birth
 - when
 - where
- II. Parentage
- III. Education and travels
- IV. Works, Achievement
- V. Contemporaries

THE MASTERPIECE

- 1. Structure
- 2. Meter
- 3. Setting: time, place, character, plot
- 4. Initial Incident
- 5. Climax
- 6. Story told in brief
- 7. Why I like it

TYPICAL INDIVIDUAL SELF-DIRECTED STUDY CARDS IN ENGLISH COMPOSITION AND LITERATURE

COMPOSITION

Clipping

WANTED—Butcher, must be
able to cut up and serve a
customer

Problem: Rewrite, aiming for clearness.

Tell which of the three aims has been
violated.

FOR INTENSIVE READING AND MEMORIZATION

Lines 427 to 447

1. Who is speaking?
2. What would be a suitable topic sentence?
3. What has happened just before?
4. Upon what previous occasion did the speaker
utter the same thought?

REVERSE OF INDIVIDUAL STUDY CARD

NAME	DATE	CHECKS	
		LEADER	TEACHER

To insure individual effort and afford scope for individual initiative and response individual study cards are useful. These are 3 by 5 cards. Upon the

A CARD FOR THE USE OF A GROUP-LEADER
IN COMPOSITION

QUESTIONS THAT I WILL ASK MY
GROUP-MATES

I. *What do we mean by unity in the sentence?*

Ans. It means three things:

1. That the sentence should contain but a single thought.
2. That each sentence should begin with a capital.
3. That each sentence must end with a period, question-mark, or exclamation-point.

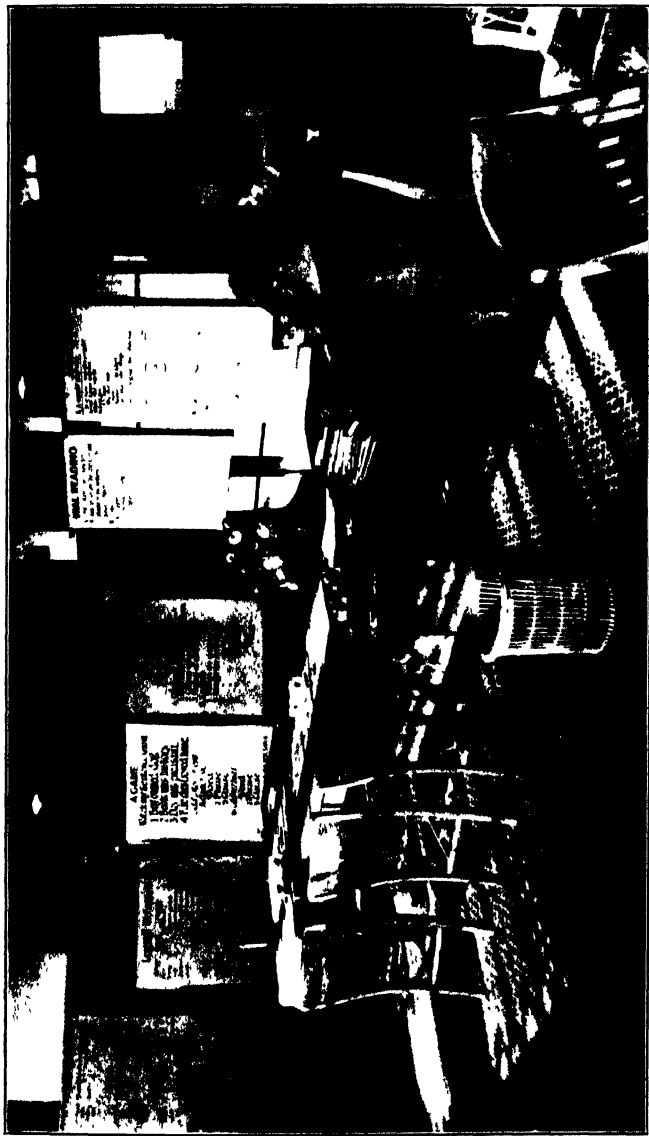
II. *What do we mean by unity in the paragraph?*

Ans. We mean that every sentence in the paragraph group must reinforce a single thought called the topic sentence.

III. *How will you know when you have violated aim A 1?*

Ans. "A 1" will appear in the right-hand margin of my paper.

face of each card the teacher writes, in advance of the period, an individual problem. The back of the card is ruled in four columns for the pupil's name, the date, and the checks by his group or group-leader and by the teacher. The cards are distributed to



Typical standard Study Guide Charts in English printed on window shades

Brackets properly placed on the walls of the English rooms

those pupils of the study-groups who are to use them, and each pupil goes to work with his text-book and note-book following the directions of the "Study-Steps" chart. When his task is completed he submits his work to the group-leader. If the work is satisfactory it is then submitted to the teacher, or it is held for his call while the pupil attacks another problem. In case, however, the individual finds himself unable to do the work, the card serves another purpose. Looking at the reverse of the card the pupil finds there the names of those of his classmates who attacked the problem before him and he is at liberty to call them to his aid, thus forming a group with a social purpose.

The pupil appreciates training in method.

He must know:

1. That he learns through his own application to Study
2. That he must, therefore, know *how to study*
3. That there are ways to study
4. That his duty differs from the teacher's because she is there to help him by assignment and check
5. That he must apply:
 - a. The STUDY STEPS
 - b. The SELF SURVEYS in every subject
 - c. The HOW-TO-STUDY chart
 - d. The PENMANSHIP CHECKS

A PUPIL'S APPLICATION OF THE STUDY-STEPS IN THE STUDY OF A PROBLEM

Grammar

Topic	Nouns and Pronouns
	Review of (a) Person
	(b) Case

Aim	Self-Governed study applied to the following problem:
Problem	Tell the person, case, and syntax of each noun and pronoun in the following sentence: We Americans do things in a hurry.
Analysis of Problem	My problem divides itself into three parts, <i>i. e.</i> (a) Define syntax (b) Select noun (c) Select pronoun (d) Give person of each (e) Give case of each (f) Give syntax of each.
Planning my Arrangement	Syntax consists of telling the way a word is used in a sentence.

NOUN	PRONOUN	PERSON	CASE	SYNTAX
...	<i>we</i>	I	Nom.	Subject of verb <i>do</i>
Americans			Nom.	in apposition with <i>we</i>
things		3	Obj.	Object of verb <i>do</i>
hurry	. . .	3	Obj.	Object of prep <i>in</i>

CHAPTER V

THE SURVEY OF ACCOMPLISHMENT

The chart on Study Steps is a constant reminder to the pupil of the necessities of the *study* and automatically puts him in line to measure up to the *check*. The Study Steps also intensify interest, encourage self-reliance, develop the critical mind through introspection, and provide very necessary drill. In the assignment-discussion preceding the *study* the Study Steps have guided the inspirational work done by the teacher, and have acted as a "lay-out" of the challenge in steps 1, 2, and 3. The pupil alone does the work under step 4 of course; but step 5, the survey step, is begun by the pupil and finished by the teacher. This phase is so important that it calls for definite organization.

In order that the immediacy of the check may be possible, not only must the classroom activities function automatically in groups, but the actual mechanism of the check must be planned and unified. Classification has characterized the *study*, which has been highly systematized. The pupil has been led to see that what he studies can be attacked through classification of its factors, and has learned to tabulate the results wherever that is possible. Study charts have accustomed him to visualization of his subject-matter in orderly arrangements of topics and subtopics, under heads and subheads, as

principal and subordinate parts. Now let the checking steps follow the same order and the pupil is impressed with its sanity.

When the pupil has grasped the idea that the challenge is a problem in organization, with main and related subordinate parts; that each of these parts must be attacked in the *study* and must finally be *checked off* as accomplished, by *himself first*, one difficulty of checking is eliminated immediately because the self-activity of the pupil has been enlisted as the first line of defense. A second check, by the group-leader, who checks from the teacher's plan-card, is often followed by a third, which takes the form of a community criticism by the other members of the group who gather before the individual's blackboard and view his work, directing social criticism upon his failings. A certain number of every study-group do their work at blackboards for this very purpose. It is seen that the teacher is the final arbiter of rating; much of the checking is done before the work reaches him.

There is a valuable suggestion to the teacher in the idea of projecting forward the critical spirit so that it begins with the student himself, and in fostering the community spirit in criticism of their fellows in a helpful way *before* it is finally submitted. It is made to work through the use of the chart idea. For example, in a challenge in written composition the pupils are led to see that the result can be criticised from several view-points, and the oak-tag chart which the assignment-discussion follows and which later guides their *study* (that is, the writ-

ing of the composition) bears criticism-headings in some such order as the following:

CHECKING FORM FOR ENGLISH COMPOSITION

FORM				RHETORICAL AIMS		CONTENT	
TITLE	MARGINS SPACING	PUNCT'N	SPELLING	CLEARNESS	EMPHASIS	STRONG	WEAK

The pupil works with this chart as a constant reminder. He is habituating himself to self-criticism on objective lines. So are all his fellows; and each, as well as the group-leader, will follow the headings of the chart in criticising himself and the others. All written expression done in the school is checked upon the points of the chart and upon these points only. Hence everybody knows what he will have to face. There results a confidence begotten of the assurance that no unexpected or hidden enemy will spring upon them. Each pupil, on the completion of his work, presents it with the feeling that he has checked himself upon every vital point and has, in addition, made correction of errors which had at first escaped him and which have been discovered by his group-leader or his fellows. The teacher, then, receives a rather highly finished product, and is not confronted with a battalion of errors on every page. His personal criticism may be centred upon the few errors that have escaped notice in the primary and secondary lines of criticism.

To make the organization and effectiveness of this checking form most patent, each pupil makes a copy of it at the end of his composition so that the checks for the several points may be entered there and the whole totalled. He then transfers the results to his individual card which reveals his progress in composition through the term. A form for this individual card is given below. It is cut from oak-tag by the pupil himself and is of a size to fit in his loose-leaf note-book:

PROGRESS CARD IN WRITTEN COMPOSITION

NO	DATE	TITLE	MAR- GINS SPAC- ING	PUNC- TUATION	SPELL- ING	RHF- TORICAL AIM	CON- TENT	GEN- ERAL RAT- ING
1								
2								

The entries on this individual card are made by the group-leader with the agreement of the pupil, and only the general rating need be made by the teacher. The teacher's rating is always made in conference with the pupil concerned during the class period while the others are continuing their work; thus his check is personal, individual, and immediate.

This form of check has various advantages. It economizes the teacher's time and energy, vitalizes the pupil's interest, disciplines him, keeps him posted as to his standing, reveals his progress, isolates his faults. If he is a careless speller, this fact is apparent;

if his carelessness is in the mechanical arrangement, the faulty form stands out; if he has failed to comprehend or to apply his rhetorical aims it will so appear. Thus he knows in what particulars he should improve and, at the same time, the teacher is informed and makes his plans accordingly. The matter is never left to generalities; the pupil is not told he is "poor in composition;" he knows in just what particular part of the art he is deficient, and the defect, being isolated, is the more easily corrected.

A checking chart on "rhetorical aims" in Composition works well and is given below. The assignment brings out an aim such as "*clearness through the placing of modifiers*" and the result is charted in its place, becoming one of the aims of all future Compositions, and so on until all have been covered in the successive grades of the school. The final chart will appear in this general form:

RHETORICAL AIMS IN COMPOSITION

I. CLEARNESS AIM A

1. through unity
2. through placing of modifiers
3. through choice of words

II. EMPHASIS AIM B

1. through the question
2. through inversion
3. through climax
4. through direct address
5. through exclamation

To check results we make an Achievement Chart:

ACHIEVEMENT CHART IN COMPOSITION

RHETORICAL AIMS	CHECK	
	STRONG	WEAK
I. CLEARNESS		
Aim A. 1. .		
A. 2.		
A. 3. .		
II. EMPHASIS		
Aim B. 1. . .		
B. 2.		
B. 3.		
B. 4.		
B. 5.		

This chart is copied by each pupil on the back of his Composition Achievement card, and he checks each attempt. The checks grow in number through the term and spread down the card as he takes up one new aim after the other.

To make the Study Steps more effective from the social view-point, and to afford opportunity for the manifestation of the social significance of the group idea, it is always well to have some members of the study-group do their work on the blackboards. Since their work is visible to all, it is checked by all the members of the group, who, when the study is completed or has progressed to a definite point, pass together along the blackboards, criticising each under the direction of the group-leader or the teacher. The blackboard worker, as well as the seat worker,

has arranged at the end of his work his checking form as follows:

COMPOSITION CHECKING CARD

		GOALS	
		GOOD	POOR
I. <i>Form</i>			
a. arrangement			.
b. penmanship			.
c. punctuation			.
d. spelling			.
	Total for form		per cent
II. <i>Rhetorical aims</i>			
A. 1.	.... . . . .		.. . . .
A. 2., etc.	.... . . . .		.
B. 1.	... . . . .		.
B. 2., etc.	..... . . . .	.... .	. . . . .
III. <i>Content</i>			
IV. <i>Estimates as a whole</i> —pupil's		.	.... .
group's			.
teacher's			.

As a commentary upon the checking phase of the challenge, remembering that every Study has been preceded by its Assignment, the success of the study is not only possible but highly probable. Achievement is a dominant factor in effective method. The pupil attacks his Study problem in no wavering frame of mind; he knows the form his work should take and is familiar with the procedure; his task is very *definite* and his results will likewise be definite. Writing maketh an exact man. The note-book will be checked for precision. The pupil has every aid at his disposal—text-books, reference books, maps, pictures, charts, outlines, definite forms to follow. He

has time and a place for work. There is every reason for success. His own will to succeed is not disregarded. Success is usual and is rewarded in the check-recitation by the commendation of his fellows, the teacher's praise and his own satisfaction.

This point is more important than may appear. Success ought to follow pupil effort. Failure can follow because of two factors only: either the Assignment has been insufficient or the pupil is in the wrong group. In either case the fault is the school's. If the pupil is in the wrong place the remedy is obvious; if the assignment has been a failure, the recitation revealing it, there is nothing to be done but repeat it. It is useless to put the blame upon the pupil. Of course, stupidity is common enough; but as long as this affliction does not interfere with the progress of others in the school there is hope. The shocking hypothesis is that we achieve our imbecilities as individuals, just as nations have achieved their imbecilities. The spirit of our whole procedure is to liberate power. Our contention is that vast resources of human potentiality are yet untapped.

Habituation of the pupil to self-checking or self-surveying is a very important feature. Self-activity in each of the phases of the learning process makes for the unity of that process and aims, it will be remembered, at the development of power and ability to undertake new work. If the pupil has been taught in a high sense, the result of that teaching should be a power of organization and analysis that will carry him through the intricacies of a problem en-



Three groups in Typewriting, (1) working on an exercise in transcription, (2) a group working with a leader from a chart hanging on the front wall, (3) discussing the mechanical structure of the typewriting machine

tirely new in content. He will embark upon the new adventure confidently because of his successful past experience.

The Check step reveals to him the importance of his Study task, and also the necessity of his proper approach to it. That is, knowing the Check, he realizes that he must be prepared to measure up to it. Hence the wisdom of the unit form of Check organization and the value of a study of the problem of checking. It is so vital that it goes to the root of teaching; one might go so far as to say that upon the efficiency of the Check all the rest of the process depends. It is true to this extent: the pupil, being human, will do just as much as is demanded and expected of him. And the Check is the teacher's demand, the community demand of the group, the group-leader's demand. Finally the pupil discovers that it ought to be his own *demand upon himself* because mastery of the topic requires it. When he reaches that point we may truly say we have "taught" him.

The child is his own best teacher. The teacher functions most effectively when he bears this point in mind, and so organizes the plan of his own activity as to give it the greatest possible scope. We have already pointed out that the teacher has little or nothing to do with the Study because that activity is the pupil's own responsibility. The teacher has more to do in the Assignment, but even there he develops new powers through creating a pupil-teacher partnership. In the final step, the Check,

mastery. Self-mastery comes through self-criticism expressed honestly. The pupil is bound to be honest with himself; he cannot cheat himself with a half-

A CARD FOR INDIVIDUAL CHECKING IN WRITTEN
COMPOSITION

COMPOSITION GOALS			
I. Form	PRELIMI- NARY	MID- TERM	FINAL
1. Arrangement			
2. Penmanship			
3. Punctuation			
4. Spelling			
5. Grammar			
II. Rhetorical Aims			
Aim A. 1			
A. 2			
A. 3			
B. 1			
B. 2			
B. 3			
B. 4			
B. 5			
III. Content			
IV. Rating			

This 7 by 9 card is each pupil's individual record. It will indicate his achievement under the heads of the Composition Study Charts, showing his progressive gains. The card is best ruled with one column for each essay in the term.

completed task. If, as a result of study, he knows, and knows that he knows, that is mastery of subject and self.

This is a Pupil's Prospectus Card in English outlining the pupil's efforts for six weeks in the subject,

including Leadership power. The card is made of a piece of oak-tag cut of a size to fit into the pupil's loose-leaf note-book. The reverse of the card, also

Name							
Class (Blackboard Wednesday No 3)							
PRELIMINARY PROSPECTUS IN ENGLISH							
WEEK	GRAMMAR	DECT SPELL	COMPOSITION	STUDY	LITERATURE	ORAL READING	LEADERSHIP
1	Pts. of Speech, pp 169-74 Write exercise 175 Phrases 180 Ex. 181	Lesson 31	Model L-2 108, 147 Original A-1			Six successful attempts	Six attempts at contribution to good of group
2	Clauses 163, 194, 183, 302 Verb Study 171, 230 Complement 294	32	Model Topic Sentence 88, 97 Original A-2	Charts six weeks	reference to	weeks	weeks
3	Verb Correct use of 207, 210, 214 Rel. Pro 170, 190	33	Model A-3 244 Original A-3 13, 67, 73	Study out the	work in the Lake	out the six	out the six
4	Preposition Correct use of 226, 228	34	Model Original A-1 B-1	directed through	units of Lady of	through	through
5	Complex Sent. 183 Subord Conjunction 190, 212	36	Model Original A-2, B-2	Six self Continuous	completed "The	Continuous	Continuous
6	Adjective Correct use of	37	Model Original A-3, B-1		Six		
Final	rating						

shown, is for the teacher's check ratings in the same headings. She enters by rubber-stamp or other entries her estimate of the achievements of the pupil in his self-directed activity.

The parents have a part also.

THE SURVEY OF ACCOMPLISHMENT 79

It may appear that excessive energy is required for checking results of pupil effort. The task may strike one at first thought as being insuperable. The

(Reverse of Card SS1)

TEACHER CHECKS IN CORRESPONDING SQUARES						
Name						
Class (Class Secretary Survey Leader)						
ACHIEVEMENTS						
WEEK	DICT SPELLING	COMPOSITION	STUDY	LITERATURE	ORAL READING	LEADERSHIP
1						
2						
3						
4						
5						
6						
Final	Rating					
Parent's Signature						

new teacher is working in new ways in the new school. The practice of asking questions at the rate of three so-called questions a minute is no longer found. Teacher-talk is now superseded by pupil-

power. No doubt new skills are demanded. Directing effort toward a careful scrutiny of what each pupil produces for himself calls for a ready skill in catching the main issues in the challenge and a quick eye for good (and correct) forms. It must also be borne in mind that the system uses the pupil himself as the primary check, his group-leader and his group-mates as secondary checks—and these eyes are sharp! The product is well finished before it reaches the teacher. But the important thing to be remembered is the shift of emphasis from a talking teacher and a listening pupil to working-groups where each pupil is going forward under his own power doing tangible work that can be appraised by teacher and fellow pupils.

The plan of checking is no mere bookkeeping arrangement. Fruitful methods of checking are suggested. Every teacher can adapt and improve them. Opportunity is provided for a personal and direct relationship between teacher and pupil in the promotion of the intellectual life. Pupils soon learn to make distinction between genuine and spurious performances. Errors and inaccuracies are diligently checked. Judicious praise is not lacking, and the praise of one's peers is sweet. The pedagogical vitamins operate in many silent and unsuspected ways in this new classroom procedure we are projecting. We have sought in this chapter to make vivid one of the central factors working in and through the Group-Study Plan. A new *freedom in work* is actually being realized. The devices described in much

detail are mainly suggestive. The teacher liberated from the conventional demands of the "lesson-hearing school" will become inventive and skilful in directing the creative genius of boys and girls. Large opportunity for co-operative effort is provided. There is freedom to experiment. The basis is laid for creative mastery. A clear distinction is made between those things that need to become essentially habituation and those enterprises which challenge free minds to creative endeavor.

CHAPTER VI

PUPIL SELF-DIRECTION

There is no greater differentiation between the old and the new school in any phase of school life than in the means of control. The old school is an autocracy; the new school must be a democracy. The old school functions through teacher-domination; the new school, working on a basis of pupil-self-activity which arises automatically out of its grouping, is designed to liberate talents. As soon as the pupil achieves a comprehension of the group-study idea the time has come for a substantial reorganization. The Group-Study Plan supplies at once the need and the way. The study groups cannot function without self-direction and the pupil soon discovers this fact—that study can be accomplished only under conditions of decency.

Habituation to study (which is 100 per cent self-active), means habituation to self-direction because the idea functions subconsciously all through the school day in every classroom. The pupil finds himself a member of a self-governing small community in every period before he actually realizes that he is performing the miracle. Let him thus get the idea of self-government and its relation to his own freedom; let him understand that the school need not be altogether an autocracy with all its regulations coming down from the principal and functioning through the vigilance of the teachers; let him realize

that, as a citizen of a democracy, there is an obligation, a responsibility upon him; let him, in brief, get the idea of *citizenship*—and he is ready for self-direction in the school.

What is this idea of citizenship that the pupil grasps? Fundamentally it is the idea of obligation, of responsibility. His activities in the classroom put him in the way of discovering two things: first, that if he governs himself there is little necessity for governing others; and, second, that “laws are not made, they are discovered.” The way has been paved by practice and other good things follow naturally. The important point is the habituation. Pupil-self-direction schemes of one form or another have been tried and discarded in many schools in the last century. Where they have failed, the failure has been due to two main causes; the principle has not been understood, or the idea has not functioned naturally through the organization of the classroom activities. Pupil-self-direction goes along with, and is a part of pupil-self-activity.

The alternations of the teaching-learning process, so highly systematized through the Group-Study Plan, keep the pupil so occupied that he governs himself in order to maintain himself. Whenever a pupil is too busy to be disorderly, too busy to be thinking of rules at all, too interested in the work at hand to be considering mischief, that pupil is beginning the practice of self-government. It is essentially habit-formation. The Group-Study Plan brooks no idleness. It is a teacher-pupil partnership with a

common purpose; both partners co-operate toward a common goal. This co-operation is absolutely basic and is the warp and woof of the group procedure. The very atmosphere of a group classroom is co-operative—the pupil works with his group-leader, contributes to the group project, and *wants* to do these things: he finds that he must govern himself with certain propriety in order to accomplish them.

There arises an understanding of responsibility for self-sustained study. The incessant repetition of this requirement develops the power that it is the duty of the school to create. Herein lies the meaning of pupil-self-direction. It is the developing of the power and the desire to measure one's *self* by some self-selected standard in every branch of endeavor. The pupils as well as the teacher understand the pupil-teacher partnership, and that the old formalisms of routine of the classroom have been discarded. The pupils appreciate also that the group-study plan functions for their good and not through the teacher's whim. The latter does not appear to dominate—in fact he holds himself as far aloof as possible, being silent toward the *study*, encouraging pupil participation in the *assignment-discussion*, and being the last line of defense for the *check*. Therefore, the pupil is the more easily impressed with the necessity for manners, customs, laws, in the group.

His intelligence and self-interest being enlisted, he may be trusted to make and obey laws for the classroom that will result in his own benefit. It is obviously the duty of the school to encourage this idea,

but it will never become real until it is made a vital factor in the teaching method and in the school routine. It is not a thing that can be put on and taken off like a glove. In the Group-Study Plan it is an essential element in every period; it is imperative. The study cannot function unless pupil-self-directing power is developed; the assignment-discussion comes to a standstill without it. In other words, if there is no self-government there is no teaching in our new interpretation. The instinct to self-direction exists in the pupil. It needs only habituation. Self-activity is the key-note of the challenge, and self-activity can function only through self-government; one cannot exist without the other. The teacher may fear that the "order" of the classroom will be upset. So indeed it will. The quiet of the old school is quite disturbed by the new life. But there is little to fear because (the secret being in organization of the pupil's activity), as soon as the necessity of the alternations are made manifest, and the routine more or less settled, the pupil takes care of the rest himself because he is becoming a responsible individual who can be trusted with power and freedom.

Let us not lose sight of the purpose behind this training—the purpose of the school to train to live a community life. Any form of pupil-self-government that is based on the idea that it is for the purpose of making the "discipline" easier is on the road to failure. Autocracy is the easiest "discipline" method. Immediate results are simple of accomplish-

ment in this as in the "teaching." But training in pupil-self-direction has a greater aim. It does not directly concern itself with the school, but rather with the pupil. As the idea of American democracy rose out of and took form from the town-meeting, fitting its own necessities, so the idea of pupil-self-government must rise out of the classroom life, fitting itself to the needs of that life and expressing itself through constant participation.

The idea, once established, develops in the school as a whole in any one of several ways. Encouraged by the classroom atmosphere of freedom to move, participate, discuss, the pupils will discover naturally the need for rules of procedure which the wise teacher will encourage them to formulate. They will need officers, and these they will elect. Leadership in subject-matter is made much of by the teacher, so group-leaders are chosen, holding their places by the superiority of their accomplishment. These officers are given every opportunity to act, the teacher handing over to them the control of all possible routine class movements such as departmental changes, the management of clothing, the collection and distribution of material, the movement and some of the activity of groups; the idea being to permit the growth of the idea of self-direction through elected leaders, giving training in obedience to officers of their own choice. It would, of course, be fatal were the teacher to interfere directly in the choosing. The essence of the matter is that, survive or perish, the pupils are deserving the

credit for success, and they must take the responsibility for failure. The teacher has, however, a powerful check: all officers must be citizens in good standing; deficient pupils are not eligible.

The idea of group-leadership by selected pupils is full of suggestion and practicability. Besides its value in developing pupil responsibility—vital enough in itself, it is at once a teaching-device and a teacher-training device. When a pupil is informed of his or her selection to serve as group-leader in a certain topic of a subject on a certain future day, what is more natural than that the pupil so selected will prepare himself for the effort? Group-leaders do that very thing. Fully conscious of the weight of the coming responsibility, they pervade the library and, when the time for their duty arrives they are full of the subject. They realize that they are “teachers” for the nonce, and they become living proofs of the truth that one never learns until one teaches. Intensiveness in preparation is concomitant with success in leadership.

The further suggestion is in teacher-training. There is no doubt of the value of the idea that has been recently offered: the idea that the junior high school might do something in the way of preparing its pupils, especially the girls, along the line of *teaching*; which they will take up later as their profession. If there is anything in this idea, it is of value only in so far as it is functional. The pupil must put himself to work at teaching, he must *do* the thing he is learning. The group-leader is in a splendid

position in this respect. He does the very things that good teaching demands: (1) He prepares himself; (2) he organizes his preparation; (3) he plans his presentation; (4) he checks the results of his work through the success of the discussion, and through the efficacy of the study by his classmates upon the topic.

Our whole plan is based upon pupil-self-activity; everything in the plan is measured by its influence upon the development of self-activity. The more leaders we can develop the more personal and intensive is our reaction. Some teachers are remarkably skilful in their development of pupil-leadership power—and pupil-leaders are pupil-teachers in embryo. The suggestiveness in this topic is intriguing. Individual teachers will carry it through in individual ways and to varying degrees. A "Group-Leader Club" is a splendid device in a school. In this club the members discuss methods in leadership—methods in motivation of group-activity, of "assignment"—of "study," and of "checking." The club is a clearing-house of difficulties and problems. They actually work out a technic. And it is indeed interesting to see members of this club—all members are, of course, group-leaders in their classes—"observing" in other classes during their own unassigned time or during auditorium or gymnasium periods from which they have been granted leaves. They do this to watch one another work, to get ideas for improvement in their own service. It is a delightful development of the Group-Study Plan.

The next step is one of widening. The pupils, by this time conscious of their obligations, discover that all the pupils in the school are concerned with large movements in corridors, on stairs, in the auditorium, in playgrounds before and after school, and on the street crossings. From this grows a school self-government organization, a "school-state" or "school-city" with Mayor, Board of Aldermen, Court, Police, Health, and Street Departments, and its multitude of officers. Thus comes bulk, and consequent danger of failure. We must not forget that Plato limited the possible number of citizens in the Republic to 5040—so large schools will take warning! But this complex organization is not the essential thing. Only as a growth arising from honest needs does it justify itself. And regardless of its form, the main thing is that the pupil learns from it that, as a citizen in a school community, he is under certain obligations to his fellows, and that he is impressed with his social responsibilities through his membership in the body politic and scholastic.

Much can be done with the idea. If the ideal of service to the community, of citizenship, is to be developed, it must be done as scientifically as everything else in the school should be done—with a method that comes through the unity of the school programme. Pupil-self-government must come in the same routine as any other school activity; it must be attacked in the problem spirit; must be *studied* and *checked*; it must be a matter of pupil interest, must come out of the school needs *as the*

pupil sees them, must be a part of the school. It cannot be a superimposed organization ruled by the school officials.

The principal governs the school, the pupils govern themselves. The principal reserves to himself the prerogative of ultimate veto. The pupils know that they govern themselves with his permission and as far as he permits. This permission is given them in the form of a charter which delegates to the pupils the government of certain things in and around the school. The pupils, then, with this charter as their base of operations, through their Board of Aldermen, make certain laws under which their school-city shall function. They are limited by the charter and their laws are valid only in so far as they are within the chartered rights. They may, then, punish offenders against their own laws; they do not enforce the teacher's laws except upon request. And happy is the school in which the pupils' laws and the teacher's laws coincide!

It is not within the scope and aim of this volume to discuss in detail the subject of pupil-self-government as such. So much only is devoted to it as will make it clear that it is a form of self-activity and a natural development of self-activity in the school. It will suffice to say at this time that it grows slowly, that experimentation with it will reveal that it has the same imperfections that democracy has everywhere, that the evils of democracy will creep in, that it must be watched "with Emersonian respect," guided, and guarded. Incessant vigilance is its price.

CHAPTER VII

THE TEACHER'S PLAN OF WORK

Whatever the method of teaching used, teachers everywhere write a "plan" of their projected presentations. Usually a "plan-book" suffices and the lesson organization as well as the material to be presented is written in somewhat sketchy form in this book. The "plan-book" is the teacher's companion to and from school—as well as in her hours of ease in the evenings at home, when she prepares for the work of the following day.

The "plan-book" idea is not by any means perfect. The book is of considerable bulk, which involves a problem in its transportation, it is very inflexible, lends itself too readily to formalism, opens the temptation to meagreness, and must be duplicated from term to term. A better method must be sought in the planning of the challenge under the Group-Study Plan, which calls for flexibility, freedom from duplication of labor, immediacy and variety of application, and adaptability to the needs of the supervisor as well as of the teacher. The Group-Study Plan involves economy throughout, and economy should mark the planning scheme of its users.

Modern business and industry have discarded books wherever cards will better serve. The school can do the same thing with profit to itself. We recom-

mend the use of cards for the teacher's plan, and a procedure is submitted as suggestive.

The first step, as in any form of planning, is to organize the projected work of a school term in each subject by topics. To begin, the teacher will take one card for each topic of the grade in the subject in question, and, on the first line write the name of the topic. Thus he will have, as the first step, as many cards as there are topics to be covered. The second step will consist in listing these topics on one or more other cards in the order of their intended sequence in a single column at the left, numbering them in rotation.

To this point we have two kinds of cards:

CARD A'

Civics—How laws are made										Topic I. 1.

CARD B'

CIVICS												I.
		1	2	3	4	5	6	7	8	9	10	etc.
1	How laws are made....											
2	Legislative bodies . . .											
3	City government ..											
4	etc etc etc.											

Card B', Card B'', Card B''', etc., are progress-checking cards. In the appropriate column the

teacher will check as the topic is accomplished, using one column for each term's work; thus the cards will reveal progress by topics in each term, and the card may be used for as many terms as there are columns ruled. These cards, called "topic" cards, serve as a self-check for the teacher, indicate to the head of the department and the principal the progress being made in the class, and do these things without duplication of labor and without interruption of the work because the "topic" cards are available for inspection separately at any time. Being always checked to date they always reveal present conditions.

Now to return to Cards A', A'', A''', etc., called "detail" cards; the teacher fills in, upon each, whatever matter he intends to present, whatever matter he intends to hold himself and the class responsible for. This matter may be written upon the cards in whatever degree of fulness it might have been written in the old-fashioned plan-book, or clippings from magazines, old text-books, newspapers, may be pasted on. Any matter, in whatever form it presents itself, that will be of value to the challenge, is sure to find its way into the card-box and to be filed under the proper topic heading-card. Thus, under Card A', all valuable matter concerning the topic "how laws are made," will be filed on cards as fast as the teacher finds it, and the content of the topic grows in fulness with each succeeding term's experience as additional detail-cards are inserted. Conversely, of course, doubtful or unsuitable ma-

terial is discarded as better takes its place. The plan grows richer with each term of use, and the card-box becomes a mine of material always at hand. The teacher does well to form the habit of clipping live material as he finds it, and pasting the clippings on cards at convenient times for filing upon his arrival at school in the morning. It is astonishing how rapidly and how easily and naturally a mass of interesting and important material will be gathered in this way, for present or future use.

Flexibility and growth being provided for, it is in order to indicate the value of the card-plan method in its relation to economy of teacher-energy and to its application to the Group-Study Plan. Duplication is waste. Material that is of value in one term of work ought to be at hand for the next term. To re-write it is silly, to file it is sensible. Freshness results from flexibility; it does not always accompany a new plan-book. The drudgery of the plan-book may well be displaced by a more modern method of teacher-preparedness. A few blank cards habitually at hand ready for notes will provide freshness of content far in advance of the old-fashioned system. The energy of the teacher is conserved in the card-plan method because of its immediacy to his studies and his casual reading.

In application to the needs of the group classroom the card-plan system is of greatest worth. As soon as differentiation of activity begins to function in the classroom the teacher's plan of work must undergo modification to meet the new demand. A "daily plan" in a plan-book becomes an impossibility.



Two groups in the Music period, a "rendition" as a reward for study while a Study group is engaged in work upon the staff.

Where half-a-dozen groups are at work upon as many different topics or phases of the same topic the teacher is put to it to plan and organize so that each group may function at its fullest. He must have at hand and in readiness assignment material, study material, references, for all who need them. There must be full content and suggestion for the quickest, different matter for the slowest. The solution is the card system. The cards contain so much that no pupil can exhaust their possibilities, and, at the same time, the box contains cards that supply to every individual the work he should have.

The card-box contains hundreds of cards, covering, by topics, all the subject-matter of the grade. Hence, even if the groups become most widely separated there is matter in the box for all, and the teacher's "daily" plan is made of a selection of cards containing the possible material to supply each group during the day. It will be seen that the cards form, without duplication, a "term" plan (which is the entire box), or they may constitute a series of "monthly" plans if they are so divided, and they make as many "daily" plans as the various groups need. The problem is one of mere selection and accretion.

Recommended for flexibility, immediacy, variety of application, economy, the card-plan idea has the further virtue of definiteness. The group-idea teacher must be *prepared*. There is no possibility of success with a "hit-or-miss" plan of work. Not only the topic is to be planned, but all the detail of its treatment must be written in. Far more will be required

than the usual plan-book reveals. And this completeness is encouraged by its very form, because the teacher, realizing the permanency of the card-plan method, will the more willingly make it full. The teacher of Mathematics will find it to his advantage to write or paste on his cards the actual text of all the problems he uses under any particular topic; the Grammar teacher will accumulate a store of illustrative sentences for study, of phrases, of clauses; the Geography teacher will collect data. There will be masses of the stuff of which challenges are made and by which challenges are awakened. No reaching for text-books, no searching by the teacher in the classroom for problem material—nothing can take the place of readiness. Whatever is needed to keep the work going must be at hand, in usable form, and immediate.

This idea of readiness must also be understood as applying to the use of the cards by the pupils as well as by the teacher. Group-leaders need a guidance which the cards can give; individual problem activity can be actuated through other cards. Separate boxes can be used for the filing of cards for pupils' use, boxes that they soon become accustomed to using and which grow in content through the term and the successive terms. This idea is very suggestive; the wise teacher will spend a few minutes each evening in writing problem-cards¹ for the next day's study and will find the effort well rewarded in individual and group effort. Or, if the

¹See pp. 63-64.

teacher so choose, secretaries in the classes may make the problem-cards for her by copying from her plan-cards, placing one problem to each card. These are placed in the box before the school session begins, with the result that every pupil, on entering the class, finds problem material awaiting him. These problem-cards are in sufficient number to provide one or more for each student, each card containing one problem only, with references to aid in its study. On the reverse the problem-cards are ruled in columns for the names of the pupils who study the card in turn, for the dates and for the checks. By a glance at the reverse of his problem-card any individual can find the names of those who have preceded him at the problem and may call upon any of them for help.

The plan-card boxes are, it is seen, activity centres, foci of interest. The more fully they are equipped and the more skilfully used by the teacher the greater the ease of classroom administration and the greater the scope for pupil-self-activity without teacher-talk. Everything that goes on in the classroom finds its beginning and its end in the boxes. Copies of all the charts used are there, as are study helps, checking forms, references—anything and everything that will help to *keep the study going*. The contents of the boxes are made for use. Cards become soiled or worn out; they are easily replaced. Ineffective matter soon finds the trash-basket. The card-plan idea is absolutely fluid; nothing need become crystallized, nothing static.

From the view-point of the supervisor the card-plan idea has other virtues. The topic-cards from all the classes of the grade may be inspected at any one time in the principal's office to determine relative progress or to act as an aid in the making of tests. The checks down the column will indicate how the classes are faring as to topics covered and how closely the classes are following any predetermined time-schedule agreed upon. And this can be done without disturbing the teacher's working plan because the detail-cards and problem-cards on her desk are not disturbed. Another use by the supervisor is in his inspection of classroom work by visitation. Upon entering the room he will find in the plan-card boxes, without interrupting the teaching, information as to topics covered to date as well as the character of the treatment of the detail of those topics. The teacher's "daily" plan he finds in the pack of cards lying on the desk outside the box or in the individual cards he finds the pupils using. It is a help toward the elimination of supervisor-talk as well as teacher-talk. If the supervisor will take the trouble to inform the teachers at the beginning of the school year what other, possibly more official or personal, information he will need upon his visit, this matter also may be subject-matter for cards which he will find in an agreed place. In short, the cards lend themselves to the idea of *getting things done* and help to minimize loss of time and interruption of the main activity of the classroom, the *study* by the pupils.

Back of the plan-cards there is a term-schedule by months which indicates projected covering of the work. This, of course, stands as long as the course of study remains unchanged and every teacher has a copy. The cards themselves contain no indication of the time element because they are used at different times by different groups. The time element is shown in the card-box, if the teacher so desires, by the insertion of index-cards, but these are not commonly needed, serving only to complicate the box. The teacher will find it easier and better to fill in a memorandum-card of his own indicating what topics will be covered in a certain time; and these are usually the results of subject conferences for uniformity of time and content. Individual memoranda of group alternations are also made on cards as lesson-organization guides. These are very simple skeleton outlines of the form of a lesson period. Such a card is given below:

GROUP A	GROUP B
20 min Study Last assigned lesson	20 min. Assignment <ol style="list-style-type: none"> 1. Check on study 2. Oral recitation 3. New topic Solar spectrum
20 min Assignment <ol style="list-style-type: none"> 1. Check 2. Recitation 3. Assignment Solar spectrum 	20 min. Study Of above Chart

The type and size of the cards may vary to fit conditions. Commercial cards 4 by 6 make very satisfactory material, ruled for written entries, plain or unruled for pasting; 5 by 7 cards will serve as well. But whatever size is used should be uniform throughout the school for ease in handling and inspection by the supervisor. Filing boxes should be provided, also uniform in size, two or three for each teacher, to allow for growth of content and fulness of detail. It is also advisable to provide short filing-boxes to hold the "daily" plan—the working-box for the day.

During the first term of use the card-plan will, of course, grow fastest. It is not at all necessary that it should be filled at once with all the projected material of the term. At the beginning the "detail" cards, A₁, A₂, A₃, etc., will appear, one for each topic to be covered in the term; and the "topic" cards which list these detail-cards will be inserted. This is the skeleton of the plan. Now the teacher will begin to fill in his material under topic A₁, "How Laws Are Made," inserting behind card A₁ as many material-cards as the topic calls for, each material-card carrying matter illustrating or illuminating the topic, or carrying a problem relating to it (problem-cards). So the work goes on, day by day, the teacher writing or pasting material on cards at home nightly in preparation for the following day and inserting them in the box behind the proper "detail" heading-card. Thus the box fills during the term. The skeleton plan has been serving

all this time as a topical outline and the topic-cards B₁, B₂, B₃, etc., are being checked as each topic is covered. Usually teachers prefer to write their cards for a week or two in advance, so that the filling of the box is not as slow a process as it may appear. Conscientious teachers who have been slaves to a plan-book will discover advantages in the card-plan idea and will modify it to their needs. They will appreciate its ease of handling, its economy, its applicability to the groups and the individual and its flexibility. It puts a plan to work.

A typical working plan-box can be seen on the teacher's desk in the illustration, Plate I. Problem-cards are in the hands of pupils working at the blackboards in Plate X.

CHAPTER VIII

SUPERVISION

The technic for the supervisor will undergo a change in adaptation to the necessities of the Group-Idea classes. Upon his entrance into the classroom the supervisor ought to find (1) pupil-self-activity manifest; (2) study should be very obviously progressing; (3) every blackboard in use; (4) study charts in place; (5) note-book activity by seated children; (6) assignment activity engaging the teacher will be a probable feature of one of the corners, or she may be, at the moment, (7) engaged in checking study work. This is a first glance for orientation purposes.

The supervisor will remember that the study phase is the most important, and will now check more intensely the work of the study-groups. This he can begin by an examination of the blackboards, observing first the form of the written notes, then the content, discussing each blackboard, if he so desires, with its author. The seated pupils may receive his next attention, their note-books revealing their effort. He is at liberty to call from their places either of these groups and to discuss with them the work they have been doing, to determine its value. This will take place without disturbing others because they are accustomed to the group treatment.

In this way the supervisor may, in a few minutes, satisfy himself as to the character of the accomplishment. The assignment phase he leaves to the last because it is least important for his purpose, and because the results of the study he has just seen revealed the success or failure of the previous assignments and indicated the character of the assignment work of the teacher under observation. That is, the success or failure of the study is the measure of whatever assignment preceded it, because the aim of all the work is the development of this study power. The supervisor has visual proof of the pupils' power of organization of the lesson problem because the blackboards and note-books are in constant use by study-groups, this written work revealing their training to that extent. His quiet discussion of their work with the pupils or groups he interviews will reveal whether or not their study has been formal only and will indicate the line of his criticism to follow. During his inspection of the study work the supervisor gets an incidental impression of the type of assignment work the teacher is capable of. Intensity of attack, freedom of pupil-participation, control of the teacher's voice, use of visual aids—all these will be manifest even although the assignment and its correlative recitation are carried on in the most subdued tone.

When he has finished with the study work, the supervisor will "listen in" to the assignment then going on, to measure the value of the presentation and checking steps and to satisfy himself that the

automatizations of the preceding steps have functioned into results. On the whole, the class that evidences the most study organization ought to check up best. If, on the other hand, a class which has not shown evidences of study indicates recitation ability it may be presumed that vivid presentation and drill have characterized the teacher's method, and there has been a reversion from the ideal of training in power; the teacher may have sacrificed the ultimate aim to achieve an immediate result.

There is always this danger in the public school. The teacher works under more or less driving pressure and is habituated to the feeling that "results" will be measured by so-called "achievement." The more the pupil knows, or seems to know, the greater the teacher's success—a natural feeling, shared by the pupils, the parents, and possibly the supervisory force. Glibness of recitation, quickness of response to the inspector's quiz—these suffice in many instances. And the brighter the child the greater the loss. The bright child soon gets the idea that speed is the most important thing because he sees it constantly applauded, so he sacrifices accuracy, fulness, and thoughtfulness to quickness of response. He is always ready to "take a chance" in his answers, and cultivates the art of guessing. The supervisor can make no greater error than to encourage him.

The art of questioning invites the eloquence of writers on pedagogy and the study of teachers. Supervisors also may well delve into its mysteries,

for, upon the character of their questioning the type of teaching will depend. The teacher is very human and will instinctively follow the trend. If "rapid-fire" responses are in the air, rapid-fire teaching will be in order against the next inspection, and the word will go round. Rapid quizzes have their place, but that place is subordinate. Facts must be known and the teacher should be willing to hold himself responsible for a knowledge of the facts of his grade and subject by his pupils. But it is a grievous error to permit the idea to get abroad that immediacy of response is an ultimate achievement. Drill will accomplish wonders in this direction, but drill, important as it is, is far from being everything.

Let the supervisor beware, then, of overencouragement of the drill-master. He will do well to check the results of drill, but he must not fail to evoke thought and to measure power. In every examination to determine accomplishment of teaching-aims the supervisor must take pains to introduce these factors. To illustrate: the class should respond to questions based upon the content of the teacher's plan-cards; that is, they should measure up on work they have been over, type work on the course of study. This is in the nature of drilled work. But this is only one part of the business, and not at all the greater part. The aim of the school is the development of *study* power, the ability to take up new work. The inspection and examination by the supervisor will, therefore, consider this, and his test

must include it in one form or another. Every test, in short, should cover both phases of the work, the content of the course of study on the one hand, and power to undertake new matter on the other. At least 50 per cent of the test should be upon *study*, upon ability to organize as shown in note-book work and upon ability in the solution of problems similar to but not identical with the work already covered. This part of the test is carried on with text-books or reference books in use by the pupils, and its aim should be to determine power in the use of sources and in the organization of the details of the topic. The pupil's response should be correct in form, should indicate training in the *study steps*, should show intelligent self-survey, and, above all, should reveal training in the habit of analysis of the problem.

Of course, the supervisor will check the classroom in general; the presence or absence of real pupil-self-activity, of pupil-self-government, of painstaking effort in the form of all the written work on blackboards or in note-books. He will observe whether or not the teacher properly alternates her activity between checking study and assigning new work, the self-survey by the pupil as part of his study, and whether or not the teacher has so organized his work that the automatizations function fully. An inspection of the teacher's card-plans will be a part of the supervision, and use of the cards by the supervisor will economize his effort and encourage the teacher to a fulness of planning.

Supervision carried out on this plan, following closely as it does the teacher's effort, furthers the unity of the school while it assures the supervisor that full activity characterizes the class work. Supervision of this type automatically eliminates consideration of the talking teacher because its focal point is the self-active pupil.

CHAPTER IX

LESSON ORGANIZATIONS

The following pages are devoted to Group-Study Plan outlines. The organizations are given in some detail so that the reader may have the better idea of the group alternations, the pupil-self-activity, the timing, and the place of the teacher. Each outline is followed by a summary in skeleton form for further clarification. The challenges given are, for the most part, simple ones using two or three groups. The reader will understand, of course, that they are suggestive only and that they may be enlarged upon and modified in many other ways.

PHYSICAL SCIENCE

Seventh Year

The class is divided into three groups (about fifteen pupils to the group) and group-leaders assigned. The leaders are selected from those who manifest ability to grasp the subject, and from those who possess natural qualifications in leadership.

All the materials are on the laboratory-table, charts are in place, assignment slips made out and a definite position given to each pupil in order to conserve time. The leaders keep a record of the work covered and are responsible to the teacher for the work of their groups at all times in all periods.

The period is now divided into three time-periods of approximately fifteen minutes each. These are

further subdivided into ten minutes of work and five minutes for correction, individual instruction or discussion. The reader will not infer that such exact divisions of the class period are to be standardized. This illustration is intended to convey a descriptive account of a real situation. The main purpose is suggestive.

Now let us inspect our three groups and see what

GROUP A	GROUP B	GROUP C
<p>* Ten minutes <i>Demonstration</i> at laboratory-table. Oxygen</p> <p>Five minutes Leader discusses apparatus and writing up of experiment</p>	<p>Ten minutes Simple individual experimentation. Carbon dioxide</p> <p>Five minutes Discuss and summarize with leader</p>	<p>Ten minutes Study from question chart at seats and at blackboards</p> <p>Five minutes * Correction by <i>teacher</i></p>
<p>Ten minutes At seats Write up experiment and diagram apparatus</p> <p>Five minutes Questions answered in writing from chart (Marked by teacher out of class)</p>	<p>Five minutes Discuss and observe apparatus with leader. Correction by teacher* of their work done in first third of period</p> <p>Ten minutes *<i>Demonstration</i> at laboratory-table</p>	<p>Ten minutes Individual experiments</p> <p>Five minutes Discussion and summary</p>
<p>Ten minutes Individual experiment</p>	<p>Ten minutes Write up experiment</p>	<p>Ten minutes Preparation and study of material for next individual experiment Petri dishes Sterilization *<i>Demonstration</i>.</p>
<p>Final five minutes of period. Summary, questions, discussion, by all three groups.</p>		

*Teacher participating.

each is doing. Group A is the assignment group for the first third of the period, and has demonstration work at the laboratory-table. For the second part of the period they will be at their seats for note-book and text-book study, and for the final third of the period they will again be at the table for individual apparatus work. The other two groups alternate their activities also as indicated in the following summary:

PLOT OF TEACHER'S POSITION IN THE GROUPS

GROUP A	GROUP B	GROUP C
Ten minutes <i>Teacher</i> demonstrating	Ten minutes Individual experimentation	Ten minutes Written work at seats under leader
Five minutes: Under pupil leader	Five minutes Discussion with leader	Five minutes Correction by <i>teacher</i>
Ten minutes At seats writing	Ten minutes Demonstration by <i>teacher</i>	Ten minutes Individual experiment
Five minutes Questions under leader	Five minutes Discussion by both groups with <i>teacher</i> . Two groups merge. Summarize individual experiments.	
Ten minutes Individual experiment	Ten minutes. Write up experiment	Ten minutes <i>Teacher</i> demonstrates Sterilization of Petri dishes. Shows beef Agar media Explains exposure of plates
Five minutes Class unites in mass at seats The <i>teacher</i> and the leaders of Groups B and C question class on findings in individual experiments.		

It will be noted that the teacher has been free to focus her attention at all times except the last five minutes upon small groups who need her.

PHYSICAL SCIENCE

Eighth Year

Class in two groups, A and B.

The A Group is at the laboratory-table.

The B Group is at seats writing reports in note-books on previous experiment.

The teacher presents the problem to Group A:

Why are fixed pulleys used?

They observe some in the room, as the window-shades. They recall from their knowledge of life, as, clothes-lines. The problem is thus made real and practical.

The aim of the lesson is deduced from the problem and is now written on the blank chart (oak-tag) hanging on the wall.

Aim: To learn the advantage of a fixed pulley.

Steps followed:

1. Necessary materials at hand.
2. Pupils arrange apparatus.
3. Use metric weights.
4. Test with various weights.
5. Observe amount needed to balance.
6. Deduction of advantage as regards force or power.
7. Deduction of reason for use.

Pupils note no advantage in power. Deduction: Power must equal weight. They note that there is an advantage in change of direction of force.

Group A now return to seats and write up the experiment in note-books, following the steps given below:

Aim	Method	Conclusion
Materials	Observation	Sketch of pulley

The teacher now has both groups engaged for a few minutes at note-book work, and takes advantage of the opportunity to give individual attention to a few of Group B. Then Group B is called to the table, bringing with them their note-books for further checking by the teacher and for use in the assignment about to take place. This will be the same topic as was just covered with Group A.

A few minutes before the end of the period, the assignment being completed, Group B will return to seats to arrange note-books and begin their writing, while the teacher will use the time to check Group A's study note-book work.

SUMMARY OF THE LESSON

Science Eighth Year

GROUP A	GROUP B
<i>First half of period</i> <i>Assignment</i> 1. Recitation for apperception 2. New aim developed and discussed 3. Use of apparatus 4. Making of chart outline	<i>First half of period</i> <i>Study</i> Note-book writing guided by Study Chart This is on work Assigned in previous period
At the end of the Assignment both groups will be in seats writing for a few minutes Teacher checks Study note-books of Group B	
<i>Second half of period</i> <i>Study</i> Note-book writing guided by Study Chart which developed in Assignment	<i>Second half of period</i> <i>Assignment</i> Same as for Group A above

Last few minutes of period, both groups write, teacher checks.

SCIENCE

*Ninth Year**Topic . . . Food**Subtopics*

1. *a.* Nutrients in food
Tests for nutrients
- b* Food values in terms of energy
Idea of calories
2. Diet
 - a.* Mixed diet
 - b.* Balanced diet
 - c.* Factors in selecting proper diet
 - d.* Dietary values in common foods
Proportions with respect to needs of body
 - e.* Cooking . . . its value
 - f.* Vitamines . . . Lipoids
 - g.* Fads in diet. Special foods

Procedure

After analyzing his outline the teacher is ready to proceed.

The study of Biology is a good illustration of how well the group idea lends itself to the teaching of scientific subjects. In the first place there are demonstrations and charts. In the ordinary method these are presented to the entire class, with the inevitable result: the pupils in the rear try so hard to see something of the demonstration—without success—that they soon give up trying. Then comes the “fight.” The teacher tries to force attention from the fellow who has lost interest.

With the group idea, a group of convenient numbers comes to the demonstration-table and gathers round it unconventionally. The teacher demonstrates; they all see the results. Some try to repeat the experiment; they learn to manipulate; they *do* things.

Now, what about the other pupils? Here is a teacher's opportunity. Now he has a chance to teach study, to dig things out of a book for themselves, to get ideas, and not merely memorize words. With the endless "teaching" and note-copying the pupils have learned to memorize much, but they do not know how to use a book. Failure in the senior high school may often be traced directly to this cause. At the beginning it is necessary to guide the study group by a chart containing topics or questions. Later, they may be permitted to proceed without this help. Their results are read and criticised by the teacher. Original outlines and diagrams are encouraged. In fact, this work is so valuable that, even when there is no demonstration scheduled, the class is still kept in groups to work out different aims from their texts.

In mid-period the groups change places. The demonstration group go to their seats and enter their results in their note-books with the help of text-books, while the study group come forward to the table, bringing their note-books with them for inspection by the teacher and discussion. Then they proceed with a demonstration on the same topic or another subtopic.



A very formal grouping in a primary class of first-year pupils The Assignment group is with the teacher, the Study group being left

ENGLISH

Seventh Year

The class may be divided into two groups based on Intelligence Quotients, or on some form of linguistic tests. At the beginning of the term pupils are trained in taking places for assignment, study at seats, and blackboard work. Each pupil has his place and his blackboard. This is for automatization and economy of movement and time. After that, as soon as pupils enter the room they go to their places for the period and the teacher finds the class at work upon his entrance to the room; the assignment group has begun its work under a group-leader, the blackboard work is started and the seated group is writing out the study of their previous assignment in their note-books guided by a chart which has been hung up on the wall.

Group A starts the period as the study group. A chart on the reading of "The Lady of the Lake" is hanging before them. The chart contains questions on thought and content, and it contains more work than can be accomplished by the fastest worker so that all children will have plenty to do. Some members of the group are working at the blackboards. The teacher, who will be busy at this time with Group B, will so plan the work of that group that she will be afforded time to leave them long enough to check the study work of Group A at the proper interval.

Meanwhile, Group B is ready for its assignment. With the teacher they are busy on Spelling and Word Study. They have their text-books with them. Sentences containing the new words are used by the teacher; the children try to get the meanings, first, from the teacher's use. An oak-tag sheet is hanging at the teacher's side, and an Assignment Chart begins to grow with a definition content. This is the form used (the pupils are accustomed to the use of the terms of logical definition of nouns):

WORD CHART		
SPECIES	GENUS	DIFFERENTIA
pronoun complement	is a word is a word	used instead of a noun that answers who? whom? what? after the predicate
university etc.	a building etc	used as a place of learning etc

While the children are busy at this the teacher is set free to check some of the work accomplished by Group A.

Returning to Group A, the teacher conducts a recitation in which the children give original sentences containing the new words. Then the group-leader directs the group in a whispered concert oral spelling drill, the words being spelled in syllables by the group thus: "complement": "com," c-o-m; ple, p-l-e; "ment," m-e-n-t; complement. During this exercise the teacher is again free to check Group A. (Time to this point, 20 minutes.)

Group B now returns to seats and some take places at the blackboards. Their study task is to write the new words with definitions and then to use them in original sentences. This will take the second 20 minutes of the period.

The teacher now gives her attention to Group A who have until this time been busy with their study. The first step is the check on the work done. This check begins with a survey by all the members of the group of the blackboard work done—a social step of community interest. The group moves from blackboard to blackboard, checking by criticism or applause the work of their fellows, discussing the penmanship, the form, the content. The teacher leads the discussion. When this is finished, the group gathers about the teacher in the corner, any notebooks that have not been seen are checked, and the assignment of the new work begins.

A summary of this lesson is given on the next page.

ENGLISH

Composition—Grade 7A

The class arrives in the classroom, having just come up from the auditorium, where they have scored a victory with a class demonstration in whispered concert oral reading. Their success is pictured in their happy, flushed faces. And they know that they were a “hit” because they had exhibited results of self-governed group study in the classroom preceding their public demonstration. They had fol-

SUMMARY OF THE LESSON

ENGLISH

Second Term—Rapid Advance

GROUP A	GROUP B
<i>Study First half-period</i> Aim Appreciation of beauty "The Lady of the Lake"— Canto IV <i>Chart</i> 1. Indicate the scansion of any four lines 2 Why do we scan poetry? Of what use is this knowl- edge 3 Select figures of speech in lines 503-526 How do these figures help the expression? 4 Select one narrative pass- age Give reason.	<i>Assignment First half-period</i> Aim Spelling and Word Study 1. Words presented in sen- tences by the <i>teacher</i> 2. Word pronounced by teacher by pupils 3. Word defined from teacher's use, species, genus, differ- entia 8 minutes
	Teacher free to inspect Group A's Study 3 minutes
	4 Words used by pupils, sen- tences built up by other chil- dren in the group adding to them 5 minutes
	5 Whispered concert oral drill under leader 2 minutes
	Teacher free to inspect Group A
	6 Lesson summarized and change of groups 5 minutes
Time to this point	Twenty minutes
GROUP A	GROUP B
<i>Assignment Second half-period</i> <i>Teacher with this group</i> 1. Check on blackboard work by the group for community participation 10 minutes 2. Assignment of new matter. Descriptive passages for Reading 10 minutes	<i>Study Second half-period</i> At seats Writing in English note-books. Spelling words, definitions and original sen- tences 20 minutes
Total time . . . 40 minutes	

lowed the aim expressed on their oral-reading study chart, which is: "In oral reading I shall endeavor to secure the attention and interest of my audience to the passage chosen." They read, they thought, they conquered.

What heartless teacher could throw the blanket of repression upon so much genuine spontaneity? But help comes from the Composition leader, William. He marches up to the front of the room and, with all the dignity of his office, he writes on the blackboard: "Let us all have our say at once in our composition books." Then, referring to his diary in the group-leader book, he announces that Group A is the study group for the period.

Immediately Group A breaks up into two sub-groups, blackboard workers and seat workers. They write the "aim" at the head of each page and each blackboard, and their thinking machinery is now set in motion. Group B gather in the corner around their leader, who acts as their chairman. He calls upon each in turn. The others listen with pad and pencil in hand. Their jottings go down whenever the imperative impulse to interrupt would have had its way. To-day the road that leads to their Thanksgiving composition takes the following trend:

GROUP B

Edith: "I can't forget that picture of Ivan and Anna, the Russian immigrant couple. Did you see the suffering on Ivan's face! How his wife was devoted to him!"

Bella (two years in the United States): "Yes, that is just how my father and mother felt when we decided to leave the old country."

William (Composition leader): "How about that picture from *Nicholas Nickleby*? That puzzles me."

George: "Why?" That was a good one; Mr. Squeers was so cranky and the pupil was so frightened. Bernard and William were both so real."

William: "I think it isn't a real picture because it is not true to life. I have never seen a school like that."

Miriam: "But, William, you had better read again the heading in your book where that story appears. Here it is: the title reads, *Schools and Schooling of Long Ago*. This is just like our History. It tells how things used to be."

Estelle: "My sister in High School got the books from the library. She used to read parts of it to us. I can never forget the hardships of Squeers's school."

Frank: "We have something to be thankful for! We don't have to go to such old-fashioned schools."

Isidor: "Can you imagine a school city government there?"

Philip: "Or an orchestra?"

Sam: "Or Science rooms, or shops?"

Miriam: "Or learning Grammar like a game?"

Bessie: "Or dancing your dactyls and trochees?"

Sydney (to Composition leader): "William, I suggest that we take as our next assignment a composition on: "What We Have To Be Thankful For."

Joseph: "Just a minute before we go to our seats. There is a fine little picture in this week's loose-leaf *Current Events*. It shows a grouchy man in the act of asking: 'What have I to be thankful for?' Let us each clip that picture and paste it at the top of our compositions."

Anna: "Good! I am going to label this picture: 'My topic sentence.' "

Twenty beaming children are now going to their seats. Each is full of his self-imposed problem. He is going to create his own picture. Each will be different from the others. Each is going to "spring a surprise." There will be nineteen judges in his own group, not counting the teacher. If it is very good, maybe it will be used as a model for the Study group. Maybe it will go on a model-chart! Here goes!

This lesson is given in full to indicate the spirit of the assignment groups. It might be well to point out that the life in the group is fostered by the group community spirit. The children are accustomed to freedom of speech and participation. The oral work is very lively, although quietly spoken. The group leader actually functions, the group secretaries are real officers. The thing is absolutely natural, yet based on technic. Because there is no waste through indifference there is lots of time to go easily and slowly.

The lesson summarizes as follows:

COMPOSITION 7A

FIRST HALF-PERIOD	
GROUP A	GROUP B
<p><i>Twenty minutes</i> <i>Study</i> Written composition Subgroup 1 at desks with composition exercise books Subgroup 2 at blackboards. Topic To write the story of their success in the auditorium.</p>	<p><i>Twenty minutes</i> <i>Assignment</i> Oral discussion, grouped together standing around group-leader, upon topic of Thanksgiving composition.</p>
<p>Teacher is free to give her attention to the activities of either group, or of both in alternation. She joins either group, taking part in the discussion if need be, or noting an error in blackboard work and correcting it or sitting down beside a seat-worker to suggest or comment.</p> <p>Both groups are entirely self-active and habituated to self-sustained effort and self-government, hence there is a great deal of content to the lesson.</p>	
Second Half-Period	
<p><i>Twenty minutes</i> Group A now leaves its seats and blackboards and meets the teacher. In a group they move along the blackboards, criticising, admiring, suggesting, discussing. Individuals read what they have written so far. The teacher makes any necessary comments, and the children take up the written work again, following the rhetorical aim of the day.</p> <p>Both groups will carry on the</p>	<p><i>Twenty minutes</i></p> <p>Group B is busy the remainder of the period with written composition work. They do not need the teacher at this time, and she confines herself to Group A.</p> <p>composition at home</p>
Total time of period 40 minutes	

ARITHMETIC

Fifth Year

Aim: Multiplication of a decimal by a whole number ending in a cipher.

GROUP A	GROUP B
<i>Assignment—</i> 7 Min. Oral Arithmetic Presentation of new topic Aim 10 Min. Multiplication of a decimal by whole number ending in cipher * <i>Teacher</i> with this group	<i>Study—</i> Written problems on topic previously assigned 17 Min.
3 Min. Type problem at black- board by one of group as a social contribution	Check by <i>teacher</i> * 3 Min problem study on
<i>Study—</i> 17 Min. Written problems on topic just assigned	<i>Assignment—</i> Oral Arithmetic 7 Min. Presentation of new topic as in Group A 10 Min. * <i>Teacher</i> with this group
3 Min. Checked by * <i>teacher</i>	Type problem at black- board by individual pupil

*Indicates teacher participating.

COMPOSITION 5A

GROUP A	GROUP B
<p>Transcription (Study) 15 Min. <i>Aim</i> Study of a model business letter with special attention to form Pupils transcribe letter from composition textbook <i>O'Shea-Eichman</i>, page 36</p>	<p>* Oral Composition (Assignment) 15 Min. <i>Aim</i>. Coherence of thought and expression in paragraph form <i>Steps</i> 1. Review of story by teacher 2. Unit of thought in each paragraph developed by children with help of teacher 3. Development of the sequence of sentences used in each paragraph</p>
<p>* 5 Min. Survey of model letter Teacher checks up pupils' transcription and finds out if model is understood by substituting other business letters Teacher now goes to Group B</p>	<p>20 Min. Writing of composition developed above <i>Aim</i>: Coherence <i>Steps</i> 1. Children begin writing composition while teacher goes to Group A</p>
<p>15 Min Study <i>Aim</i> To write an imitative business letter using the business letter studied as a model</p>	<p>* 2. Teacher corrects individual compositions at desks of pupils 15 Min.</p>
<p>* 5 Min Correction of letters under direction of the teacher</p>	<p>5 Min Oral reading to group-mates of compositions selected as most successful</p>
<p>* Teacher participating. Teacher oscillates from group to group</p>	

LITERATURE

8B—"THE LADY OF THE LAKE"—CANTO 2

Aim: Appreciation of the Beauty of the Selection
(content):

(a) Of Thought

(b) Of Language

GROUP A	GROUP B
<i>First Half-Period</i>	
<p>10 minutes <i>Assignment</i> Teacher with this group</p> <p>1. Questions on the Story of Canto 2</p> <p>a. Three main divisions brought out</p> <p>1. The Chase 2 Hunter lost in Trossachs</p> <p>3 Ellen's Isle on Loch Katrine</p> <p>b. The Evening Song "Soldier Rest"</p> <p>Correlate with music</p> <p>2 The "Setting" of the Lesson—in Canto 2—given by <i>teacher</i> who reads Stanza 1 and parts of Stanzas 2, 4, 5, and 7 orally</p>	<p>At blackboards 10 minutes <i>Study</i></p> <p>1. <i>The Thought</i></p> <p>Answers to questions on mimeo. papers concerning the events narrated in the entire poem (A rapid review of the First Reading of the poem as a whole) Two pupils to illustrate the "Scene" of the story, by an outline map</p>
<p>5 minutes</p> <p>3 Silent Reading by Pupils, of Selected Stanzas, taken so as to preserve Continuity of Thought</p> <p>Stanzas assigned from Study Chart</p> <p>Note Teacher leaves this group, to inspect Group B's Study work</p>	<p>5 minutes</p> <p>2. Inspection and correction of Written work—by <i>teacher</i> who has left Assignment group</p> <p>Group moves from blackboard to blackboard with teacher</p>

GROUP A	GROUP B
<i>Second Half-Period</i>	
<p>20 minutes</p> <p>4. Teacher returns to group and conducts recitation-assignment as follows Questions by <i>teacher</i>, on the Selected Stanzas, as to meaning of words, phrases, allusions, idioms, etc., the aim being to bring out the thought Pupils refer to foot-notes, index, dictionaries, encyclopædia, almanac</p> <p>5. Oral reproduction of certain passages</p> <p>6. Criticism of the reproduction (a) by pupils (b) by teacher</p> <p>7. Questions by pupils on the reproduced passages</p> <p>Answered by (a) pupils (b) teacher</p>	<p>20 minutes</p> <p>3. The Language Figures of Speech Define (a) Simile (b) Metaphor (c) Personification</p> <p>4. Mimeo papers containing Definitions and examples of these figures distributed at teacher's signal</p> <p>5. Each pupil by reference to his mimeo sheet, corrects his own definitions</p> <p style="text-align: center;"><i>Chart</i></p> <div style="border: 1px solid black; padding: 5px;"> <p>6. What Figures of Speech in (a) Lines (b) Why do you so name each? (c) What quality does each figure add to the expression?</p> </div>
<p>5 minutes</p> <p>8. Personal Appeal—written What, in your opinion is the most interesting thing or happening in this canto? Give your reason Note Teacher leaves group to inspect Group B's work</p>	<p>5 minutes</p> <p>Teacher joins Group B for</p> <p>7. Inspection and correction of written work</p>

GROUP ALTERNATIONS IN GRAMMAR AND WORD STUDY

Eighth Year

- Aims:** 1. To develop the self-activity of the pupils.
2. The adjective clause . . . Meaning and Spelling.

The basis for the division is the mentality of the students.

Group A are the brighter students. Group B are the slower students.

GROUP A	GROUP B
<p><i>Study Group</i></p> <p>Aim Analysis of sentences. Charts containing the sentences to be analyzed are hung before the group, some of whom are at seats, others at blackboards. Work is done in writing in note-books and on blackboards.</p>	<p><i>Assignment Group</i></p> <p>Aim Word Study and Spelling. Words presented by teacher, each with its context. Definitions worked out with (a) context (b) dictionary Spelling difficulties indicated by teacher. Definitions of nouns given in logical form species, genus, differentia. Oral spelling whispered concert.</p>
GROUP A	GROUP B
<p><i>Assignment Group</i></p> <p>The teacher now joins Group A, inspects the written work and checks it, and the group then becomes the Assignment-group. They leave their places and group about the teacher in the corner of the room</p> <p>Aim Adjective clause. Text-book used. Phrases reviewed Difference between phrase and clause. Review adjective. Definition of adjective clause. according to function. Rapid oral drill on recognition of adjective clauses</p>	<p><i>Study Group</i></p> <p>Group B now return to seats, some to blackboards, and become the Study group. Charts are brought into use to guide the study. Words are correctly written, several times (repetition). Sentences composed. Definitions looked up and written in note-books or on blackboards.</p> <p>The check on this work is made by the teacher at the beginning of the next period</p>

OUTLINE OF ALTERNATIONS—ENGLISH LITERATURE

Ninth Year

<p><i>Group A (Study)</i> <i>"Digging In" Process</i> Pupils are answering questions either from chart, mimeograph, sheet or from back of the book on Books VI and VII of "The Odyssey." (20 min.)</p>	<p><i>Group B (Assignment)</i> Mythological stories which have been assigned for homework are being discussed with teacher (20 min) Application of a memory selection to one of stories studied (If Neptune had been discussed—the poem "A Hymn In Praise of Neptune," by T. Campion would be "assigned" for memory work</p>
20 minutes	
<p><i>Group A (Recitation and Assignment)</i> Check up Study work (5 min) by teacher Discussion with teacher of types of Greek Architecture which had been looked up at home (15 min).</p>	<p><i>Group B (Study)</i> Pupils answer questions on Books VIII and IX of "The Odyssey" from Study Chart (20 min)</p>
Total 40 minutes	

Ninth Year

GROUP A	GROUP B
Time 40 minutes	
<p>Some at board, some in seats (<i>Study</i>)</p> <p>Apperceptive—Two short stories have been read at home (The pupils are supplied with a book of short stories)</p> <p>Pupils are now to analyze those two stories. They are determining setting, initial incident, climax, catastrophe, conclusion</p> <p>They are picking out elements of conflict, suspense, surprise</p> <p>These points are being discussed (20 min) among themselves by little groups of from 2 to 6 pupils.</p> <p>After talking over and deciding, they then write them up.</p> <p>They discuss how these effects are produced.</p> <p>They underline words or phrases which help to make the story.</p> <p>They decide whether it is a story of action, character or atmosphere, or a combination of these</p>	<p>(<i>Assignment</i>)</p> <p>Oral Composition.</p> <p>Original short story discussed (They have been told previous to this to look around for material for story. (20 min.)</p> <p>During discussion points essential to story are tabulated on board or chart.</p> <p>Points included in types of story are listed.</p>
20 minutes	
<i>Second Half-Period</i>	
<p>Group A (Assignment)</p> <p>Work checked up and discussed with teacher. (15 min.)</p> <p>Oral English (5 min)</p>	<p>Group B (Study)</p> <p>Pupils sit down to write part of an original short story. (20 min.)</p> <p>Carried over to next period.</p>

HISTORY

*Seventh Year**Preparation.*

At the beginning of each week the teacher hangs up a chart containing the topics for the week (copied from her plan-card). Five minutes suffice for the entire class to copy this in their History notebooks.

The teacher has prepared individual question-cards on last week's work which are ready for distribution to the Study groups as they need them.

The class works in three main groups. As they break into these groups, Group A, a small group of ten pupils, come to the blackboards, each pupil taking his own board, and each working out on his blackboard the topic assigned to him on his individual question-card. A larger group, Group B, occupy their seats and desks and work out the new matter from their text-books, organizing the material in topical form in their History note-books. The third group, Group C, come out of their seats and meet the teacher, standing about her in the corner. This is a small group of a half dozen pupils.

Group C have the attention of the teacher, who discusses the lesson topics with them orally.

This oral discussion and assistance takes but a few minutes, and, as fast as this rapid assignment is done, the pupils resume their seats and take up

ENGLISH GRAMMAR

Ninth Year

<p><i>Group A (Assignment)</i> Oral with <i>teacher</i>. Adverbial Clauses Particularly clauses of time, place, manner. Synthetic and Analytic work on clauses (15 min)</p>	<p><i>Group B (Study)</i> From text-book classify clauses in a number of sentences given. (15 min.)</p>
<p><i>Group A (Study)</i> Apply assignment to sentences picked out in text-book. Written in note-books. (15 min)</p>	<p><i>Group B (Recitation and Assignment)</i> With <i>teacher</i>. Check up Study work (5 min) Review rules for syntax. (10 min)</p>
<p><i>Group A (Recitation)</i> Check up Study work by teacher and fellows in oral dis- cussion (10 min)</p>	<p><i>Group B (Study)</i> Give syntax of chosen words in sentences of text-book. (10 min.) (Carry over to next period)</p>

the study work with Group B. Their places are taken about the teacher by another half dozen pupils from Group B. These in turn go back to their study places and another group take their places. This shifting continues until all the pupils of Group B have met the teacher. Between the shifts, she has found time to criticise and rate the individual study work of the pupils of Group A on the blackboards, and these pupils, as fast as they have completed their blackboard work, have returned to seats and taken up the main assignment from the Study

Chart, their places at the blackboards being taken by individuals who started the period in Group B in seats.

This constant shifting has brought practically the entire class into personal contact with the teacher, and, in alternation, has given every pupil practice in study and in written blackboard recitation. The organization of the period has thus provided a maximum of pupil-self-activity while affording opportunity for each pupil to meet the teacher for an intensive assignment in a small homogeneous group.

It will be noted that the study in this lesson has begun before these intensive assignments were made. This is possible because of the character of the subject-matter of the particular lesson; habituation to organization of material carries the pupil forward until his assignment group meets.

In this lesson the teacher personally checks all study and written recitation (blackboard) work. Each pupil coming to him brings his study notebook with him for check. Those in the first assignment group are checked at the end of the period.

Summary of the Period.

Three groups of shifting type.

Group A at blackboards. Written test in review. Individual cards.

Each pupil, upon completion of his topic, takes his seat and works with main Study Group B.



Pupils from Group B take the vacant places at the blackboards and receive individual question-cards.

This shifting continues throughout the period.

Group B. The main Study group. These pupils are at work in their seats with text-books and note-books working out the Study Chart.

Group C. This is the oral Assignment group, a small group standing with the teacher for discussion and explanation of the topics for the week as contained on the Study Chart. This group is formed of pupils of Group B who come forward in rotation in small groups.

All the shifting of group-members is organized. Group-leaders are in charge of the shifting and designate the membership of the groups from the teacher's lists. It is highly automatized and routined and yet fully socialized in the main issues of creative work.

Assignment Study Chart.

This chart is hung up for the week and guides the seated Study groups in every period.

Chart

Topic: How the Colonists lived and why they felt the need of union.

a. Life in the New England colonies

1. Chief occupations
2. Soil and climate
3. Work of the women

4. Religion
Puritans. . . . Witchcraft
 5. Education
 6. Punishments
 7. Life and manners
- b. Life in the Southern colonies
1. Climate. Soil. Occupations. Products
 2. Lack of schools. . . . Reasons
 3. Plantations
 4. Life and manners
- c. Life in the Middle colonies
- Make outline similar to the above

Individual Question-Cards.

Each card carries one or two questions; as much as will require about ten minutes' work.

Typical questions:

Why did the Dutch settle New Netherland?

Explain the Patroon System.

Describe a Dutch house.

Tell about the amusements of the Dutch.

Name three Dutch governors and give an interesting fact about each.

HISTORY

Eighth Year

GROUP A	GROUP B
<p><i>Five minutes</i> <i>A review quiz</i> Group-leader in charge. He questions the group on last lesson's Assignment. Leader keeps record of responses. They follow topics as follows:</p> <p style="text-align: center;"><i>Chart</i></p> <div data-bbox="163 652 474 852" style="border: 1px solid black; padding: 5px;"> <ol style="list-style-type: none"> 1 Causes War of 1812 2. Alien and Sedition Laws 3 Embargo Act 4. Non-Intercourse Act 5. Principal Events 6 Results of War </div> <p><i>Ten minutes</i> <i>Assignment</i> <i>Teacher</i> and pupils together. A chart is hung before group.</p> <p style="text-align: center;"><i>Chart</i></p> <div data-bbox="159 1041 470 1423" style="border: 1px solid black; padding: 5px;"> <p>Aim Monroe Doctrine</p> <ol style="list-style-type: none"> 1 What is it? 2. By whom written? 3. When? <p>Events leading up to it</p> <ol style="list-style-type: none"> 4. Provisions 5. Instance when applied <p style="padding-left: 40px;">French in Mexico Venezuela</p> <ol style="list-style-type: none"> 6. Our "big-brother" attitude 7. League of Nations </div>	<p><i>Fifteen minutes</i> <i>Study</i> Guided by Study Chart.</p> <p style="text-align: center;"><i>Chart</i></p> <div data-bbox="561 551 878 827" style="border: 1px solid black; padding: 5px;"> <p>Aim To show importance of the following events</p> <ol style="list-style-type: none"> 1. Surrender at Detroit 2. Perry's victory 3. McDonough's victory 4. Attack on Baltimore and Washington 5 Battle of New Orleans 6. Treaty of Peace </div>

GROUP A CONT'D	GROUP B CONT'D
<p>The points of the planned lesson are brought out by <i>teacher</i> and discussed, text in hand, by pupils and teacher. As each point is developed it is written as a topic on the blank chart. As a result, the chart becomes complete as above at the end of the Assignment, and it is available as a Study Chart for a guide to their following study.</p>	
<p>Time to this point for both groups 15 minutes Teacher now oscillates to Group B</p>	
<p><i>Fifteen minutes</i> <i>Study</i> From text-books and reference books. Subject Monroe Doctrine. Guided by Study Chart made in the Assignment immediately preceding Chart questions and topics copied into note-books, where also the answers are entered as found in texts.</p> <p><i>Five minutes</i> <i>Teacher checks Study work.</i></p>	<p><i>Assignment</i> <i>Teacher</i> with this group <i>Five minutes</i> for checking of Study note-books Pupils now grouped about the teacher.</p> <p><i>Five minutes</i> oral recitation by individuals with criticisms of fellow pupils.</p> <p><i>Ten minutes with teacher</i> Presentation of new topic Monroe Doctrine . . . discussed as with Group A Chart used as guide to both Assignment and Study Copied in note-books for home study. <i>While this copying is done</i> (pupils return to seats to do this) Teacher is free to join Group A, and check their Study note-books.</p>
<p>Final five minutes of period Both groups studying with note-books and text-books. Teacher free to assist individuals in either group.</p>	
<p>Total time of period 40 minutes</p>	

Analyzing this challenge, it is noted that the teacher has given herself to Group A fifteen minutes in the first half-period, and five minutes in the second: total to Group A, twenty minutes. To Group B, she gave herself only in the second half-period. Each pupil has had forty minutes of the subject and twenty minutes of the teacher's time directly. Each pupil has been entirely self-active for half the period, and partially self-active for the other half. The new topic has been assigned twice by the teacher, but one group needed a fuller assignment than the other. One group, in fact, needed so little Assignment that they were able to undertake the topic almost directly.

GEOGRAPHY

Seventh Year

Aim: The Cotton Industry in the United States.

As advanced work the teacher had assigned the following topics to the class to be looked up outside of school:

Delta. Cotton States. Make a map of U. S. showing Cotton Belt Railroads from New York to Cotton Belt. Also steamship lines. The Cotton-Gin. Discovery of Mississippi River. Louisiana Purchase.

The teacher's preparation included sending to the Chamber of Commerce, New Orleans, for samples of cotton-plant and information concerning its cultivation. The material was received, including a large map of Louisiana.

The lesson organization:

GROUP A	GROUP B
<p><i>Assignment</i></p> <p>The teacher is with this group most of the time. They are gathered together in the front of the room, standing about the teacher. A large map of the U. S. is hung before them. The teacher questions as to the location of the cotton States, the character of the soil needed for cotton, climate, etc. The discussion brings out the information that has been looked up. Further discussion brings out the process from the tilling of the soil to the cotton-gin and markets.</p>	<p><i>Study</i></p> <p>The group is divided into two subgroups. One subgroup goes to the back of the room and consults the food-source map of the U. S. They also study the map of Louisiana showing the delta, cities, etc</p> <p>The second subgroup are in their seats, working with pen-and-ink and note-books. They draw maps of the U. S., indicating railroad and steamship lines from New York to important cotton-ports, the Mississippi River, etc</p> <p>Four pupils of this subgroup do their work on the blackboards.</p>
Time. . . . 20 minutes.	
GROUP A	GROUP B
<p><i>Study</i></p> <p>This group now return to their seats, and proceed to tabulate in their note-books the facts discussed in the Assignment under the following headings:</p> <p style="text-align: center;"><i>Cotton Industry</i></p> <ol style="list-style-type: none"> 1. Regions. Group of States. 2. Requirements. Soil. Climate. Market. 3. Methods of preparation. Cultivation. Pressing. Cotton-Gin, etc. 	<p><i>Assignment</i></p> <p>Teacher corrects blackboard maps, and repeats the Assignment just given to Group A.</p> <p>They will tabulate the results of the Assignment at the beginning of the next Geography period, when they will be the Study group again.</p>
Total time 40 minutes.	

During the discussion of the topics in the assignment, the teacher has been making a Study Chart on oak-tag with crayon, indicating the manner of

tabulation of topics. As each point is brought out she writes it in its proper place. At the end of the Assignment this chart is the guide to the tabulation of results by the group. A further use is made of this chart later when a review of the subject is desired. The chart is hung before the group again, and they will be required to fill in the details, either orally, in an Assignment group, or in writing, in a Study group.

The chart appears as follows:

THE COTTON INDUSTRY					
I REGION	II REQUIREMENTS SURFACE CLIMATE MARKETS	III METHOD OF PREPARA- TION	IV TRANS- PORTA- TION	V CITIES	VI PRODUCTS AND BY-PRODUCTS

The chart is entered in each pupil's note-book as a Study-activity at the proper time, summarizing the work.

GEOGRAPHY

Seventh Year

Aim: The Cultivation of Silk in Asia.

Material: Charts and Pictures illustrating steps in cultivation and preparation of silk.

1. Class enters and takes seats.
2. Class-president gives order for clothing to be put away, calling one row at a time.
3. Returning to places, homework books are immediately taken out and opened upon desks for inspection and study.

Class is now settled and in order and ready for grouping. Time: 3 minutes.

4. President takes his seat and group-leaders step forward.

Up to this point the teacher has been a spectator only.

Everything has been done through pupil-self-government.

GROUP A	GROUP B
<p style="text-align: center;">I. STUDY</p> <p>Leader calls ten of group to blackboards. They each take a board. Subgroup 1.</p> <p>Leader's assistant distributes paper to remaining members of group who remain at their desks. Subgroup 2.</p> <p>Subgroup 1, at blackboards, directed by the leader, write topically their recitation on silk, illustrating with free-hand sketch maps. This work is based on their previous day's Assignment.</p> <p>Subgroup 2, at seats, do the same type of work on papers.</p> <p>Meanwhile, the group-leader prepares a title and record-sheet containing names of pupils who worked at the blackboards and those who worked at seats. This sheet is the top sheet of the pack of Study work.</p> <p style="text-align: center;">Time . . . 20 minutes.</p>	<p style="text-align: center;">I. ASSIGNMENT</p> <p><i>Teacher</i> inspects homework note-books, marking for appearance and general indication of correctness and interest.</p> <p>Group-leader records marks as teacher calls them out.</p> <p>Teacher now calls the group to stand about her in the corner of the room where she has hung maps and charts and pictures.</p> <p>Discussion of the topic "silk culture" begins. Individuals recite on the topic, others show pictures they have found. Considerable self-activity develops out of the informality of the procedure.</p> <p><i>Teacher</i> now assigns the new lesson, going over, with the pupils, the aim and the difficulties of the lesson, finally summarizing in topic form so that the group is prepared to study the new topic.</p> <p>The group now go to seats and prepare note-books for their study of the new topic.</p> <p style="text-align: center;">Time . . 20 minutes</p>

The teacher, being through with Group B, turns her attention to Group A.

GROUP A	GROUP B
<p style="text-align: center;">ASSIGNMENT</p> <p><i>Teacher</i> calls group to attention, and marks blackboards for form penmanship content Group-leader makes a record.</p> <p>The teacher now calls the group from their seats, and they gather with the teacher at the first blackboard. The pupil who wrote it explains his work.</p> <p>With the teacher, the group moves along from blackboard to blackboard.</p> <p>After several have been discussed, the new topic is assigned in the same manner as the Assignment to Group B (above).</p> <p>Then the group return to their seats.</p> <p>Time . . . about 20 minutes.</p>	<p style="text-align: center;">STUDY</p> <p>The group-leader of Group B now takes charge of the group. He watches the work and helps where he is needed.</p> <p>Time . . . about 20 minutes</p>
<p style="text-align: center;">Total time of lesson period . . . 45 minutes.</p>	

ARRANGEMENT OF STUDY NOTE-BOOKS

<i>Left-hand page</i>		<i>Right-hand page</i>	
Name	Class. ..	Name .	Class
Date	School.	Date	School
Aim	. ....	Aim	
Assignment	....	Homework	
.	.	.	
.	
.			
		<div style="border: 1px solid black; padding: 10px; text-align: center; margin: 10px 0;">Map</div> <div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 10px; text-align: center; width: 45%;">Picture clipping</div> <div style="border: 1px solid black; padding: 10px; text-align: center; width: 45%;">Clipping</div> </div>	

CIVICS

Ninth Year

Register 38: Groups I, II, and III.

Group I, 18 members. Group II, 18. Group III, 2.

Group organization: I and II have leaders who have general charge of the work in each group, a secretary and supply officer for each group.

Subject: Civics.

Material: Paper, pens, note-books, chart for summary of lesson, chart paper (oak-tag), black crayon.

Division of Time: 15 minutes for each group-activity.
10 minutes for teacher to clear up general difficulties, and to apportion work to be prepared for next lesson.

Aim of lesson: To become familiar with the powers and duties of the President's Cabinet.

Group I is a Study group. Their duty is to search out the answers in the text-books to questions on the oak-tag chart hung before them.

Type of questions:

1. What provision does the Constitution make in regard to the President's cabinet?
2. Which department has charge of secret service?
cf fortification of
coasts?
of repair to war-
vessels?
3. Name the duties of the Department of the Interior.

Group II is a recitation and discussion group.

The leader has prepared questions on the subject. While Group I is busy with note-books, Group II carries on an oral discussion under the leader. The teacher is called upon in case of dispute.

Group III is preparing a chart for the next lesson from data supplied in the teacher's card-plan. Subject: Our Federal Courts.

The secretaries keep records of oral work. Note-books and Study papers are checked by leaders. Teacher rates only leaders.

A FIRST LESSON IN COMMERCIAL DISCOUNT

Seventh Year

Based on 100 per cent pupil-self-activity with the teacher functioning as contributing agent.

The teacher's aim, or specific objective, is to lead each child to an intelligent comprehension of the business situation in which this teaching unit occurs.

There are three points of contact inherent in this topic which the teacher may utilize in order to insure interest and vital self-activity on the part of every child:

a. The psychologic.

The child has an innate interest in the occupations of his elders.

b. The pedagogic.

Commercial Discount is merely another application of the first case in percentage. It may, therefore, be readily linked with Profit and Loss or with any other phase previously studied.

c. The social.

This topic presents numerous problems drawn fresh from life. The opportunities afforded for enlisting learner-activity are without limit.

Since the Group idea is essentially a teacher-learner partnership, in which the pupil apparently leads, there is consequently self-expression to a high degree. Since in this scheme the teacher sees herself as the wiser, silent senior partner, she naturally must make her contribution in the form of varied, practical aids and devices. Hence, we have below a picture of a busy classroom.

The classroom is converted into a great department-store, in which a general sale is going on. Aim: to set the atmosphere for Trade Discount.

Project: A 20 per cent reduction sale on all goods.

This is the first step in a gradation of difficulties involved in this particular teaching unit.

The teacher's plan-card for this lesson looks like this:

LESSON UNIT	COMMERCIAL DISCOUNT
<p>GROUP A STUDY</p> <p>Topic (review) Profit and loss</p> <p>Exercises from a Study Chart</p> <p>Aim Preparation for Discount.</p> <p>Time . . . 20 minutes.</p>	<p>GROUP B ASSIGNMENT</p> <p>Concept introduced through Dramatization of a department-store.</p> <p>Time . . . 20 minutes.</p>
GROUP A ASSIGNMENT	GROUP B STUDY
<p>1. Work corrected (checked)</p> <p>2. Each converts orally the conditions of his example into one of Discount.</p> <p>Time . . . 20 minutes</p>	<p>Each department clerk makes out the tags for each item in his department.</p> <p>Time . . . 20 minutes.</p>

The lesson as organized and planned, works out in this way:

GROUP A STUDY GROUP	GROUP B ASSIGNMENT
<p>Aim: Preparation for Discount. Work exercises on Chart 3 (These are review exercises in percentage) Teacher is free occasionally to oscillate from Assignment to Study group to observe progress.</p> <p>Time . . . 20 minutes.</p>	<p>The group is called by the Arithmetic leader and faces him in group formation. He has previously hung up, along the black-board frames, numerous clippings of newspaper advertisements announcing sales.</p> <p>The leader casts himself for the part of manager of the store, the others are the sales-people. He announces a reduction of 20 per cent on all goods, and tells them they must mark the tags to show.</p> <p>a Regular or list price. b. Sale price or net. c Rate of discount.</p> <p>Time . . . 20 minutes</p>

Group B, now commissioned with a definite purpose, return to their seats and become the Study group.

There isn't a moment to waste. Spontaneity and ingenuity on the pupil's part will supply the dynamic force that the nagging teacher could never bring forth. They take the clipped advertisements and make the proper adjustments in prices. Some leave their seats with permission of the group-leader and do their work at the blackboards.

The selection of blackboard workers is automatized through a schedule. Every pupil knows his day for blackboard work and has his own particular blackboard. Thus there is assurance that every individual will have his share and none will be neglected. This is an important trifle.

The second half of the lesson thus works out as follows:

GROUP A ASSIGNMENT	GROUP B STUDY
<p>This group is now initiated into the mysteries of discount, and, as soon as they understand, they are free to be the customers and go about to the different departments and buy from the salespeople (members of Group B), and figure the discounts to be sure they are getting the right prices</p> <p>All this is in the dramatic form and is played out as a game.</p> <p>Time . . 20 minutes.</p>	<p>Work at seats or at blackboards the department-store price-reduction tags, of which there are hundreds pinned to the blackboard frames.</p> <p>During this exercise the room resembles anything but a classroom. The children are talking at seats or at blackboards, acting as buyers and sellers and all figuring discounts.</p> <p>Time . . . 20 minutes.</p>

It will be noticed that the teacher is free. She moves from group to group, participating where she is needed, refraining from interference elsewhere. Trained group-leaders "carry on."

She withholds for later lessons the idea of wholesale buying, catalogues and discount series.

ARITHMETIC

Eighth Year

General plan of lesson :

- I. Formal mental arithmetic.
- II. Assignment to Group A.
- III. Correction of homework.
- IV. Assignment to Group B.
- Study by Group A.

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The first division of the lesson is the old-fashioned, stereotyped form of oral arithmetic, given by the teacher to both groups at the same time. All the problems are review examples, and the exercise is a rapid quiz. Time: five minutes.

Then the class breaks into its groups for the second step in the period:

GROUP A ASSIGNMENT	GROUP B STUDY
<p>The leader takes the plan-card from the teacher's desk, the group members leave their seats and group about the leader in the corner of the room. The leader starts the apperceptive step of the work in a review of the circle radius, diameter, circumference.</p> <p>Under the guidance of the teacher, the formulæ are developed.</p> <p>A circle is drawn, radius and diameter indicated. This is done on the blackboard by different pupils, who talk as they work</p> <p>This work continues, with formulæ being developed, the teacher leading by her questions over the difficult steps.</p> <p>Time: Eighteen minutes.</p>	<p>Group B remain in their seats and go to work on the Study of the Assignment of the previous lesson which they had in the last period. It was a review of the volumes of rectangular solids. The leader writes on the blackboard or hangs up a previously prepared oak-tag chart containing seven simple examples from the arithmetic text-book. The leader sends some of the pupils to the blackboards to do their work, and, in time, corrects the work and enters the marks.</p> <p>Any pupil who needs help, asks the leader or another member of the group for an explanation.</p> <p>There are often comparisons of work and results and discussion within the group. This is encouraged by the teacher.</p> <p>Time: Eighteen minutes.</p>

Step III :

Then the groups exchange places after an interim of three minutes during which their attention is upon the homework examples which have been done upon blackboards by a committee of pupils. Any

pupil who fails to note his mistake is given aid by another.

Group A now becomes the Study group; Group B the Assignment group.

GROUP A STUDY	GROUP B ASSIGNMENT
<p>The Study work for Group A consists of four problems based upon the formulæ derived in the Assignment. The pupil is required to draw the diagrams and write the rule for each problem.</p> <p>The leader has each problem worked and explained at the blackboard. A child needing aid consults the leader or a neighbor.</p> <p>Time · Eighteen minutes.</p>	<p>Same as the Assignment for Group A just given.</p> <p>Time · Eighteen minutes.</p>
Total time for this lesson: 44 minutes.	

It will be noted that Group B, in this subject, is one half-period behind Group A.

MATHEMATICS

Ninth Year

Here is a brief outline of a variation of the group routine. In this case the Assignment group, instead of gathering about the teacher and standing in the corner, are in their seats. The new work is given them without previous introduction, and they “dope out” the difficulty with the help of their text-books alone. They are free to talk to each other, to get help from one another, to move about as they need.

If one gets the point in advance of his fellows, they may go to him for suggestion if they so desire.

In the meantime, it is the Study group who are at the blackboards, each at his own board. Their work is drill or review. The teacher is free to pass along from blackboard to blackboard, criticising, suggesting, helping. They also talk together, get help from one another, discuss with leaders, move about as they please or need. There is never any abuse of this privilege.

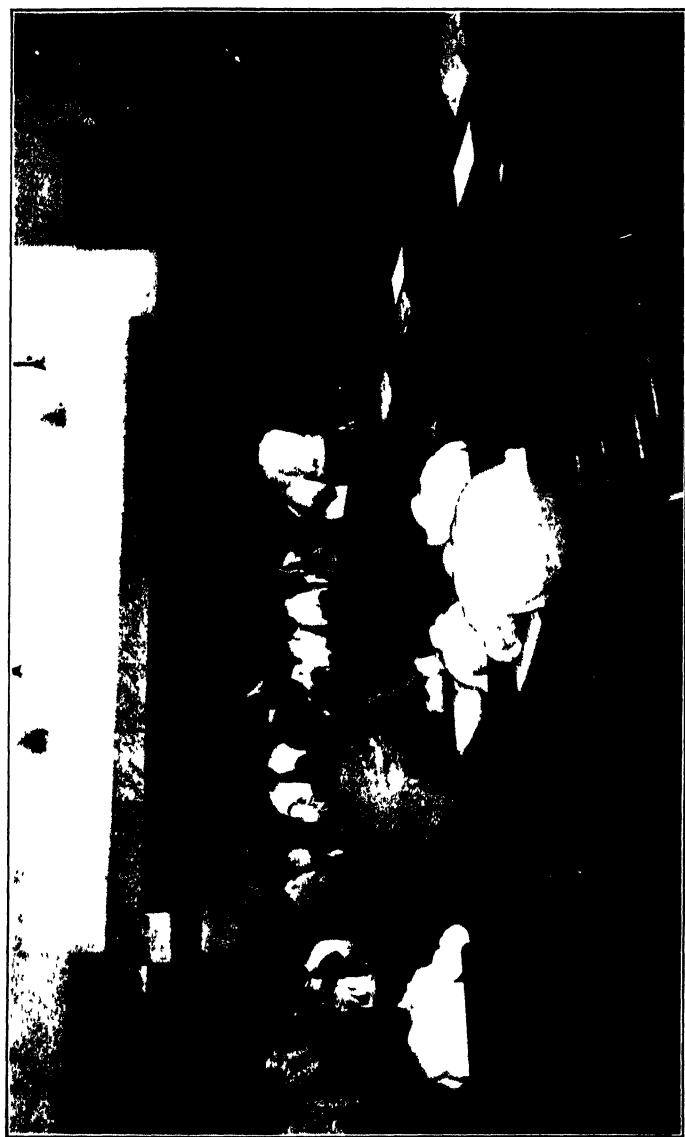
The room is noisy; the pupils are really or vitally self-active; the teacher is free. He is needed sometimes by the Study group members, again by somebody in the Assignment group. He moves about, always using his energies where they are most needed at the moment. No bright pupil is kept waiting while a slower one is instructed; no slow pupil is neglected for a brighter. No pupil is "lost," because all work at blackboards is instantly visible and because the teacher uses his own freedom to the best advantage.

At any time the teacher may stop the work to call attention to any one blackboard which will afford profit to all.

A LESSON IN FRENCH

First Term—Eighth Year

Text-book used. . . . *First French Book*—Greenberg.



The old lesson was. . . . Plural of possessive adjectives.

Upon entering the room the class goes through the usual procedure of disposing of hats and coats, taking seats, and placing the French text-book, note-book, and homework book on the desks.

The class has been divided into two groups, Group A and Group B, each of which has a leader. At the beginning of the period the leader of Group A comes to the teacher's desk, receives an Assignment-card covering the work of the day and the new lesson, and copies on the blackboard the plan of the day as follows:

GROUP A	GROUP B
<p>Write in note-book the French sentences on page 30, and translate into English At blackboards—ex. A, B, C, D, page 31.</p>	<p><i>Review</i>—possessive adjective. Correct orally the homework for to-day. <i>New Lesson</i>—First conjugation. Lesson 16.</p>

First-half of period:

At the beginning of the lesson, Group A is the Study group. Their business is to work "on their own" upon a definite task for a definite time. The leader is in charge of the group. He sends some to the blackboards to write thereon the homework from their homework books. Others of the group go to their desks and go to work upon the task given them from the chart which is hanging in front of the room, having been hung there by the leader.

Small groups of four or five are taken in succes-

sion from these workers by the leader, and stand with him in a corner of the room, where he hears them recite upon the singular of the possessive adjectives of the old lesson and its vocabulary. The leader has the book open before him so that his chances of error are minimized. He makes a note of the names of the pupils who are deficient, which he later gives to the teacher. Then these deficient pupils are required to study at home until they know the work. They are tested again on the same work by the leader after this has been done. These small groups come to the leader and return to their work at the seats until all have been heard.

During this time, while Group A has been the Study group, Group B has been working with the teacher. They begin by coming out of their seats and gathering together, standing, in a corner of the room. They have brought with them their text-books and their homework books. Orally, in quiet tones, so as not to disturb Group A, the homework is discussed, each pupil in turn giving an oral contribution. Discussion and correction, as well as the recitation are given in French as far as possible. Pupils verify their work from the oral correct answers and check their own work.

At this point, since the work of the day before has been reviewed and the homework corrected and checked, the group is ready for the new lesson, which is about the first regular conjugation. The teacher now is needed, and takes the lead. She asks: "Who can give this sentence in French—'*I speak to my cousin*'?" A pupil replies that she can say it all ex-

cept the verb, "speak." The other pupils do not know the verb either, so the teacher writes on the blackboard and pronounces the French verb *parler*, and translates it, "speak."

Frances now tries the sentence, saying: "*Je parler à mon cousin.*" Asked to translate, the pupils realize that this sentence means in English: "I to-speak to my cousin." Hence, it follows they must learn to conjugate the verb *parler*. Thus the AIM of the lesson is made real. The aim is written on the blackboard by one of the pupils.

Now the teacher shows that there are three conjugations in French, that each conjugation has its endings and each has its own way of being recognized; that "parler" belongs to the first conjugation, that verbs ending in "er" belong to the first conjugation. She calls upon members of the group to give other verbs which appear in the day's vocabulary which end in "er." *Donner* and *montrer* are given. Next comes an explanation of the stem or root of the verb as differentiated from the ending.

From this point the teacher writes the personal pronouns in order upon the blackboard, and beside each she writes the stem of the verb "parler." Then she adds the endings and soon this work appears on the blackboard:

Première Conjugation

parler . . . er, ending of infinitive

je parle	nous parlons
tu parles	vous parlez
il parle	ils parlent
elle parle	elles parlent

The endings are now studied by the group, and then individual pupils are urged to try to say them without looking at the blackboard. The group now try to say them, and repetition is resorted to until all can say them. Then the group take up "donner" and "montrer," and conjugate them. The Assignment ends as the teacher hangs up a chart containing six verbs of the first conjugation.

The group (Group B) now return to their seats and copy the work from the backboard and from the chart. Then they open their text-books and find the lesson they have just discussed on page 32. From this they will turn to page 30, and translate the sentences found on that page in their notebooks. This group is now launched on its STUDY STEP, during which time (the last twenty minutes of the period) they will continue this work on their own. The leader will call up small subgroups of four or five pupils to hear them recite the vocabulary of lessons 11, 12, 14, and 15 during this twenty minutes.

Now, for the second half of the period, Group A, who have been studying at their seats, come forward with their note-books and homework books. They go with the teacher, in a compact group, to the several blackboards where the homework has been copied by several members of their group at the beginning of the period. They criticise and correct, with the help of the teacher.

After this has been done, Group A receives the assignment of the new challenge on conjugations in

the same manner as Group B received it, and they end the period by translating the exercises as Group B did. While they are doing this, the teacher is free to inspect the results of the translations done by Group B which were being written while she was assigning to Group A.

To summarize: the forty-minute period has been divided generally in half. Each of the two major groups has had approximately twenty minutes study and twenty minutes assignment, twenty minutes with the teacher and twenty minutes of self-active, self-governed study. A summarized analysis of the time oscillations follows:

SUMMARY

GROUP A	GROUP B
<p><i>First twenty minutes</i> <i>Study Group</i> Write in note-books the French sentences on page 30, and translate into English. At blackboards—ex. A, B, C, D, page 31.</p>	<p><i>First twenty minutes</i> <i>Assignment Group</i> <i>Review</i>—possessive adjectives. Correct orally the homework for the day. New lesson—First conjugation. (Teacher with this group)</p>
<p><i>Second twenty minutes</i> <i>Assignment Group</i> Teacher checks Study work. The same work as above for Group B. (Teacher with this group.)</p>	<p><i>Second twenty minutes</i> <i>Study Group</i> Study the first conjugation. Study "Lecture," page 32. Translation, page 30.</p>

It will be noted that each pupil spends half his time with the teacher and half in self-governed study without her intervention and interference. He is kept up to the work only by the knowledge

that she will check his results at the beginning of the following assignment, even if that does not come until a later period. But the lesson works out in such a way that usually the teacher finds herself free for a few minutes at the end of each assignment, so that she may check the work that has been written by the Study group during that time.

FRENCH

Ninth Year

The class enters the room and automatically breaks into two groups. The pupils know their places and duties; the teacher remains inactive until the formations are made; the group-leaders are in charge; the group-secretaries present to the teacher their cards showing the activities of the preceding period in the subject. *Group A* starts the period as the Study group. *Group B* is the Assignment group, and gather in the corner of the room as soon as they have placed their books in their desks and their clothing in the wardrobes. *Group A* have gone to their seats and begin by arranging their note-books and text-books for Study.

Group A automatically start by copying the homework Assignment for the next period from the blackboard where it is being written by a leader, who takes the material from the teacher's plan-card. Then the leader divides the group into three smaller groups: one subgroup goes to the rear blackboards to work from the Study Chart which he hangs up;

to the second subgroup slips of paper are issued individually, each slip containing an item of the homework for the day; each pupil works his problem on a blackboard, the front boards being used for this purpose; the third subgroup remain in their seats and work from the Study Chart in their note-books or on paper. It will be noted that the arrangement of activities is such that each individual pupil has his own task and that they are in such relative positions that copying is unlikely. Further, attention is called to the fact that the teacher has had nothing directly to do with it all. *Group A*—the Study group for this part of the period—has begun its work automatically. The Study Chart referred to is a sheet of oak-tag prepared by the teacher (or by a leader from the teacher's plan-cards) in advance, containing the following:

Première Groupe

But de la leçon: Composition—Reponses aux questions.

Aux pages 77 et 78 (Pas à Pas) repondez aux questions, 1-8

Note: These questions are based on the reading which has been assigned for special study at home, and constitute a form of reproduction which pupils of this group can perform without referring to the text.

Pupils at the blackboards, as fast as they complete the task assigned them there, take their seats

and begin the work from the Study Chart, which they complete as far as the time allows.

This work for *Group A* will take twenty minutes.

Meanwhile *Group B* pupils have come together in a corner of the room and are ready for the Assignment. They have with them their note-books and papers containing the work they did when they were the Study group at the last part of their preceding French period. This work is shown to the teacher now, and receives her check, which takes but a minute or two. Then the pupils turn their attention to their group-leader, who reads the directions of the preceding day's Study Chart, now again hanging before them, and the individual pupils give, orally, the required French form, spelling the important words, as called upon by the leader. Pupils check their own papers, which are later collected and turned over to the teacher. Time: 5 minutes.

Now comes the Assignment of the new work. The teacher here becomes active for the first time. Her material is an oak-tag chart upon which is written the following:

Aim: Irregular verbs—*recevoir* and *devoir*.
Principal parts and irregularities:
recevoir—*recevant*—*reçu*—*Je reçois*—*Je reçois*.

Guided by this chart, the pupils orally conjugate the verbs in all tenses, the teacher guiding and check-

ing. Her whole attention is given to this group (which, it will be remembered, is standing about her in the corner of the room, so that the activity is carried on in low conversational tones).

The Assignment to this point will take about twelve minutes. Three minutes more are occupied in calling attention to the Study Chart which will guide their Study-group work in the second half of the period. The Study Chart, which has been prepared in advance, is:

Deuxième Groupe

But de la leçon: Les verbes recevoir et devoir

Mettez au pluriel: Je reçois

Il devait

Elle ne doit pas

Reçois-tu?

Il recevra

Elle a reçu

Je devrais

Elapsed Time: Twenty minutes.

Up to this point one-half the period has elapsed. *Group A* has had twenty minutes for self-sustained and self-governed study, *Group B* has had its assignment of the new work by the teacher, which has included her check on their study previously done. Now the groups exchange places. *Group A* becomes the Assignment group, while *Group B* becomes the Study group.

The teacher now joins *Group A*, who begin their

new activity with her by passing in a group along the rear blackboards, criticising, under the direction of a leader and with the assistance of the teacher, the work done by their fellows during the study time just completed. The study work on the front boards is then checked in like manner—all the pupils of the group thus seeing *all* the work. The next step in the assignment is the oral work. This takes the form of a condensed English reproduction of the entire story for content, followed by reading and text study with particular attention to adjectives. The masculine and feminine singular of all the adjectives on page 9 are given by pupils. Then the books are closed, and the story is acted in French—the part assigned for special study being required of all the pupils of the group; characters are chosen by the teacher; volunteers for the remainder of the story assigned for general reading only. Pupils of this brighter group are encouraged to consider this reproduction as additional outside work for those who want practice in speaking French. Time: 15 minutes.

For the final step in the assignment, the teacher calls upon one pupil to give a good idiomatic translation into English of the part assigned for special study, and leaves the group to criticise this translation under the direction of the group-leader.

Time: 5 minutes. . . . Total time for the assignment to *Group A*: 20 minutes.

Meanwhile, *Group B* has been the Study group for the second half of the period. They begin by copying from the blackboard the homework as-

signment for the next lesson. This is written on the blackboard by a pupil who copies it from the teacher's plan-card. It follows:

Devoir 2ième Groupe

I. Écrivez le verbe *recevoir*

II. A la page 186 traduisez en français les phrases

After this is copied, subgroups are formed as was done in *Group A* for blackboard work front and rear and for seat work. Blackboard workers are expected to return to their seats to take up the chart work in which the seat workers are already engaged, and to complete at least half of it. They are especially commended if they get the rest done outside of class.

See Study Chart above.

Time: 15 minutes to this point.

For the final five minutes, *Group B*, which has worked on its own for fifteen minutes, is joined by the teacher, who has freed herself from *Group A*. The group is called from seats and blackboards and, in a compact body, with a leader and the teacher, pass along the blackboards criticising the work of their fellows. The paper work is also checked at this time. The teacher, observing, ascertains just how much additional drill on the topic is needed to fix the particular point with these slower pupils.

Time: 5 minutes. . . . Total for Group . . . 20 minutes.

Total time of period of instruction . . . 40 minutes.

ANALYSIS OF THE CHALLENGE

GROUP A	GROUP B
<p><i>First twenty minutes</i> <i>Study-Group Work</i> Self-governed. I. Homework copied for next lesson. II. Work from Study Chart. III. Homework on blackboard by subgroup.</p> <p>Time: 15 minutes.</p>	<p><i>First twenty minutes</i> <i>Assignment-Group Work</i> Teacher with this group I. Preceding day's Study-Group Work recited and checked. II. New work presented by teacher with chart to guide it, individuals reciting. III. Attention to Study Chart.</p> <p>Time 15 minutes</p>
<p>Teacher now joins group which gathers in compact form for observation and criticism of blackboard work and paper work.</p> <p>Time 5 minutes.</p>	<p>Teacher now leaves Group B and joins Group A. Group B use this five minutes under a leader in discussing the Study Chart, in preparation for Study.</p> <p>Time 5 minutes.</p>
GROUP A	GROUP B
<p><i>Second twenty minutes</i> <i>Assignment-Group Work</i> Teacher with this group. I. Check on Study-Group Work. II. Oral Work Reproduction in English. Reading. Gender Study. Dramatization.</p> <p>Time: 15 minutes.</p>	<p><i>Second twenty minutes</i> <i>Study-Group Work</i> I. Homework copied. II. Work at seats and blackboards on Study Chart Work. III. Homework for to-day on blackboards by subgroup.</p> <p>Time 15 minutes.</p>
<p>Teacher leaves group alone under a leader discussing oral translation.</p> <p>Time: 5 minutes.</p>	<p>Teacher joins Group B, which gathers in compact form for observation and criticism of blackboards and check on paper work.</p> <p>Time 5 minutes</p>

FRENCH

*Ninth Year**Group A—Study.*

Under a group-leader, these pupils study and drill on verbs, guided by a chart prepared in advance in tabulated form. Time: 20 minutes.

Group B—Assignment.

Teacher devotes most to this group. These are the backward pupils of the class. Five or six points in grammar are taken up and discussed, and drill is given on various forms. Time: 20 minutes.

Group C—Discussion.

Under a group-leader, who conducts a general review of points taken up in 8A, 8B, and 9A. Time: 20 minutes.

Group D—Study-discussion.

This group has devoted most of its time for the past few days to verbs. They work under a leader.

Group E—Quiz.

This group consists of subgroups of two pupils each, who quiz each other on verbs. Time: 20 minutes.

For the second half of the period, each group works out, in writing, material they have discussed in the first half. The interest is stimulated by putting the work in the form of a game. Every ten sentences are submitted to the opponent for correction. Time: 20 minutes.

SPANISH

*Ninth Year Class**First Half-Period.**Group A.*

With the teacher as the guide, the Assignment begins.

Aim: Telling time.

Use of dummy clock.

Assignment completed with a short intensive drill on the clock, the hands being changed and pupils stating the times in Spanish.

Group return to their seats and blackboards where they work out in writing the translation of sentences involving time. The sentences have been written beforehand on an oak-tag chart—English on one side, Spanish on the other. At the end of the half-period the group-leader reverses the chart showing the correct forms and pupils check their own work.

Teacher spends this time with Group B.

Group C.

Leader in charge. Written vocabulary test.

*Second Half-Period,**Group A.*

Teacher rejoins the group. Questions and answers in Spanish based on the translation read, always in complete sentences with special attention to verb forms. Changes in person and number and tense are next in order. A subgroup work at blackboards from question-cards; these are checked later.



*First Half-Period.**Group B.*

With the group-leader in charge: Aim: Review, numbers 1 to 100. Names, seasons, and months.

Pupils count orally by 2's, 3's, etc. Several go to blackboards with cards containing problems.

Leader and group check this blackboard work by moving from board to board.

Group return to their seats to work out problems in arithmetic in Spanish from a chart. This work is also checked by leader and individual pupils check their own.

Teacher also is available to check as work progresses.

*Second Half-Period.**Group B.*

Group-leader in charge. Aim: Test on vocabulary for the day.

Pupils exchange papers after the work is done and check each other by referring to their vocabulary-list books.

Group-leader enters ratings.

Group C.

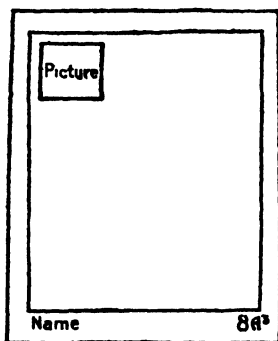
Completion of Reading and Translation Study previously started. Leader assists in difficulties.

DRAWING

Seventh Year

Aim of Lesson: Application of the principle of angular perspective to drawing of the corner of a building.

Note: Each pupil has supplied himself with a clipping from a newspaper or magazine of a picture

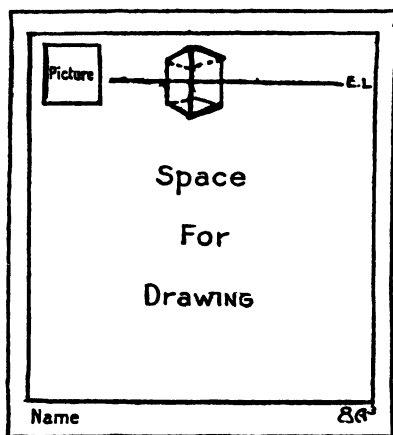


of a street-corner. These pictures are pasted in the upper corner of the drawing-paper.

The lesson begins with Group A as the Study group. After arranging their papers, the pupils review the principles of angular perspective of the turned cube with the eye-level between top and bottom. An oak-tag chart is hung before the children, from which they copy the sketch showing the review of principles. Some of the members of the group do their work at the blackboards.

Group B is the Assignment group for the first fifteen minutes.

The children are out of their seats, standing in compact group about the teacher. Each pupil has his paper on a cardboard, ready to draw in standing position. The teacher leading the discussion, the



children discover that the eye-level in their little clipping pictures is below the centre of the building. The teacher calls their attention to an oak-tag chart she has prepared in advance.

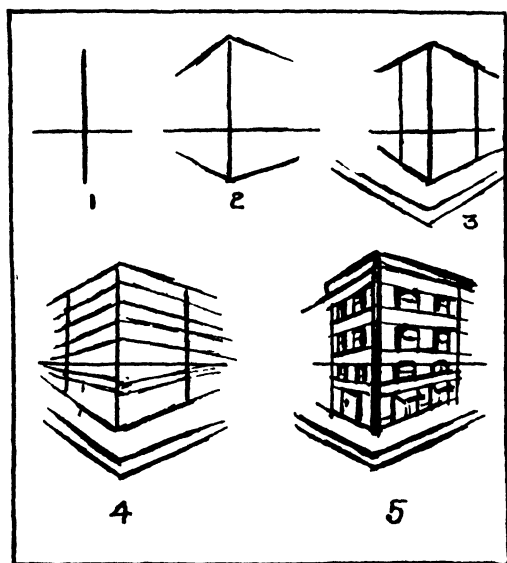
This chart indicates the steps to be taken in drawing a picture of a building on a corner, in five steps.

She calls attention, through questioning, to the fact that: (1) Where you see less of one side than the other, the slant lines on that side slant more than

on the other side. (2) The farther above and below the eye, the more the receding lines slant. (3) All vertical lines are drawn parallel to the vertical line in Step 1.

At this point the Assignment is complete. After

Chart



all have had the chance to ask questions, Group B return to seats to finish the drawing of the corner.

The teacher is now free to join Group A, who have been busy during this time with their sketch problem in perspective. She checks and criticises individually, going from desk to desk, interrupting the work of none but the individual concerned. This

done, rapidly of course, she calls the group forward. In this group position she makes general criticisms of the Study work, and then proceeds to assign to them the lesson she has just previously assigned for Group B. Time, about 20 minutes. Total time: 35 minutes.

Meanwhile Group B has gone on with its drawing from its clippings, putting in details of windows, doors, stores, etc. The small sketch of the cube is drawn also in its proper place on the paper.

Time, about 20 minutes. . . . Total for group: 35 minutes.

TIME SUMMARY BY GROUPS

GROUP A	GROUP B
15 minutes Study from chart and clipping.	15 minutes Assignment of problem with teacher
20 minutes Assignment with teacher	20 minutes Study of topic just assigned
Both groups together 5 minutes for general summary.	
Distribution and collection of materials 5 minutes.	
Total time of period 45 minutes.	

DRAWING

Eighth Year

Drawing is a subject that is well adapted to the group idea because it not only speeds the progress of the talented or apt pupil, but it allows time for

the slow worker to complete his task too. It encourages both types of pupils. Also, the group method offers sufficient freedom for the working of definite problems by each pupil individually. For example, in Design, each pupil makes up his own unit, using it in a border pattern that decorates his own book-cover. This means that there will be several sets of workers in a class, each group interested in its own problems. Individuals are thus trained to depend upon their own resources rather than upon the teacher.

Incidentally, the lesson in group form is more interesting to the teacher, because, after a brief explanation to a group, she is free to correct, help or suggest to individual workers doing individual work and she escapes the monotony of criticising the same work on every paper. Finally, it encourages originality, and individual ideas are expressed in a way and to an extent uncommon in a mass class.

How do pupils know what to do and how to do it? They are guided by the oak-tag Study Charts made by the teacher, upon which are short, helpful suggestions. These follow short, economical Assignments given to small, homogeneous groups. The pupils realize that the teacher is always available to help and criticise, and that each individual is free to express what he thinks without taking up the time of his classmates, who are either ahead of him or behind him in the work. Further, the pupils appreciate the organization of the class activities, and each knows how to help himself and where to

get other help if he needs it. Habituation plays an important part. The room becomes a workshop.

The class is divided into two main groups. The lesson is also divided into two phases, the Assignment and the Study. The Study group work individually, guided by the general directions of the Study Chart which is hung before them. A group-leader assists where necessary. The other main group, Group B, is the Assignment group at the beginning of the period. These pupils stand about the teacher in the corner of the room. Their attitude is one of attention, their interest is encouraged by their proximity to the work. In other words, the group form is economical because there is no idle indifference.

When the Assignment is sufficient, Group B, before leaving their group formation, receive final instructions upon the task they are about to undertake. Assured that every individual understands, the teacher dismisses them to their seats and they proceed to work out (study) the problem that has just been assigned.

Now the teacher is free, because Group B has left her and Group A is still at work. She takes advantage of this time to make individual criticisms upon Group A's work. This done, they come forward and form in a group about her at the front of the room. They then take the Assignment as did Group B before. They are a half-period behind Group A, and will not pursue their Study of this Assignment until the beginning of the following Drawing period, when

they will start as the Study group. By that time, pupils of Group B will have work ready for correction. Thus the work goes on without a break, and, before the end of the term there will be three or four groups busy.

SUMMARY OF THE LESSON

DRAWING

Eighth Year

GROUP A	GROUP B
AIM FOR BOTH GROUPS SHADING	
<p>Twenty minutes <i>Study</i> Copy four drawings from chart showing kinds of shading.</p>	<p>Twenty minutes <i>Assignment Teacher present.</i> 1. Check on work done previous period 2. Shading . . . Principles indicated by teacher 3. Problem for Study. Group of objects.</p>
<p>Twenty minutes <i>Assignment.</i> Teacher present 1. Check on work done 2. Same as for Group B given above. 3. Problem for Study. Group of objects. This study will be done at beginning of next period.</p>	<p>Twenty minutes <i>Study</i> Working out the problem from the model at their seats. Some work at blackboards. This will be checked at beginning of next period.</p>
Total time of lesson 40 minutes.	

BOOKKEEPING

Eighth Year

The class is divided into two main groups. Group A start the period as the Assignment group, Group

B as the Study group. Group B is divided again into two subgroups, one working in their seats, the others at the blackboards. The aim for the Assignment to Group A is: Aim: to enter in our books a new account: "Notes Receivable." Questions by the teacher bring out the fact that the pupils know that business men make use of notes in buying and selling goods, and the group discusses advantages of notes, as:

- a.* Note is definite proof of a transaction
- b.* Note can be discounted
- c.* Note is negotiable

and legal requirements, as:

- a.* In writing and signed
- b.* Payee mentioned
- c.* Unqualified promise
- d.* Definite amount of money
- e.* Time of payment fixed

Throughout the Assignment, the pupils are handling notes written in proper form and checking them by the requirements.

Now the group examine a transaction. The following is placed before them on an oak-tag chart-sheet:

July 1. Sold merchandise to John Doe, terms 10 days. \$500.
July 5. Received from John Doe his 10-day note of to-day's date for invoice of July 1. \$500.
July 15. Received from John Doe, cash for his note of July 5, due to-day. . . . \$500.

Now the entry is made on a blank sheet of oak-tag in crayon:

On July 1, a claim of \$500 against John Doe came into the business. The entry then is:

John Doe		Sales Revenue	
1925		1925	
July 1 terms 10 days	500	July 1. J. Doe	500

This entry shows a promise made by John Doe to pay this claim. On July 5, we received a note from John Doe for \$500. This cancels our claim and we must make an entry for his written promise:

Notes Receivable		John Doe	
1925		1925	
July 5	500	July 1, 10 days	500
		July 5 . . .	500

On July 15 we receive cash \$500 from John Doe for his note due. The asset "Cash" has been increased and the asset "Notes Receivable" has been decreased.

This completes the Assignment to Group A, who are now dismissed and go to seats or blackboards to make the entries of like character as presented in their text-books as a problem.

Meanwhile Group B has been performing the Study phase, in two subgroups:

Aim 1. Self-directed Study.

Aim 2. To post accounts and make a balance-sheet.

Aim 3. For blackboard workers: to provide models for work and correction for seat workers. (All available blackboard space is used.)

Their work is a review of Accounts Receivable. They are making a practice set which is a complete review of all their previous work. They follow the text-book problem: *Cowles*, page 39.

When the Study is completed they will be ready for the Assignment which has just been given to Group A. But Group A's assignment is completed ten minutes before Group B's study; hence the teacher is free to check Group B.

SUMMARY

Bookkeeping—Eighth Year

<i>First Twenty Minutes</i>	
GROUP A	GROUP B
<i>Assignment</i> Notes-Receiveable account <i>Teacher</i> with this group for the first ten minutes. Then she leaves them occupied with the problem while she crosses to Group B.	<i>Study</i> 1. At seats. Subgroups. 2. At blackboards. Posting accounts. <i>Teacher</i> with this group for the second ten minutes to check individuals as they work.
<i>Second Twenty Minutes</i>	
<i>Study</i> Make the entries as per textbook Exercise 4, page 42. Model exercise page 43. <i>Teacher</i> joins this group for the final ten minutes to check individual study results	<i>Assignment</i> Notes-Receiveable account. <i>Teacher</i> is with this group for ten minutes Group left to work out the new problem for themselves.

STENOGRAPHY

Ninth Year

The class is divided into three groups, as follows:

- Group I, composed of those pupils who grasp ideas readily—a small group.

- Group II, composed of the normal pupils—a large group.

c. Group III, composed of the very slow pupils, who need much supervision.

The groups are fluid, pupils being transferred from a lower to a higher group as their work improves. Likewise, a pupil in Group I, for instance, who does not understand a principle after it has been explained to his group, is at liberty to recite with Group II, when that principle is assigned to them.

Books required:

1. Gregg Shorthand Manual
2. Gregg Shorthand—Graded Readings
3. Market—Word and Sentence Book

SUMMARY OF THE LESSON—STENOGRAPHY

TIME SCHEDULE

GROUP I	GROUP II	GROUP III
Study-Discussion 12 min. (Under leaders)	Study 20 min (Application of work learned in previous lesson)	Assignment 12 min (With teacher)
Assignment 8 min. (With teacher)	Assignment 10 min (With teacher)	Drill 8 min.
Drill 7 min	Drill 5 min.	Study-Application 10 min.
Application 8 min		Recitation (Check) (With teacher) 5 min
35 min.		35 min
During the last five minutes of the period, the teacher settles individual difficulties which may arise in any group.		
Total time 40 minutes		

Group I.

Under the direction of each pupil in turn, dictation is given from letters in one of the shorthand

books. The work is transcribed from pupils' notes, the one in charge having recourse to a "key" if necessary.¹ (12 minutes.)

The teacher now works with this group, having left Group III, taking as new assignment advanced phrase-writing, explaining each phrase carefully. (8 minutes.)

The pupils drill under supervision of one of their number, while the teacher, thus free, joins Group II. (7 minutes.)

Finally the principle is applied to sentences in the *Word and Sentence Book*, pupils studying individually, or bringing problems to group-leader to settle. (8 minutes.) (Total for group, 35 minutes.)

Group II.

This group works at the blackboard or in seats, transcribing a letter from *Readings in Gregg Shorthand*. Under the direction of a leader, pupils dictate from their own notes, the leader writing at the board, the others correcting their outlines. (20 minutes.)

Under supervision of the teacher, who has left Group I, the group takes up a new principle—that of abbreviation as applied to figures, etc. (10 minutes.)

They then drill, with the leader in charge, while the teacher joins Group III. (5 minutes.) (Total for group, 35 minutes.)

¹See McMunn, Norman, *A Path to Freedom in the School*. Chap. I (Part II), "Boys in Partnership," and Chap. VI, "The Differential Idea."

Group III.

Assignment—a new principle is begun—the reversing of the vowel to express *r* before and after straight lines, or between two straight lines in the same direction. Together, the pupils and teacher work out new words. The pupils then take new words from dictation, each word being corrected immediately. (12 minutes.)

Under the supervision of a pupil from Group II, the drill work is carried on, the leader dictating a list of words, the pupils reading back from their notes, which is regular practice. (8 minutes.)

Study—the pupils then work individually, transcribing from longhand sentences containing words embodying the principle just learned, at seats and blackboards. (10 minutes.)

The teacher returns to this group to correct study work. (5 minutes.) (Total for group, 35 minutes.)

For the remaining five minutes the teacher is free to answer questions arising in any group.

STENOGRAPHY—II

Ninth Year

In many Senior High Schools the pupils are placed in homogeneous class-groups according to their ability in handling the subject: that is, in a Term II stenography, there may be three class-groups, slow, medium, fast.

In the Junior High Schools where very often there

is but one first-term class and one second-term class, the need for grouping within the class arises.

The following is a challenge for second-term pupils. The class is divided into groups according to their needs:

Group A—quickest group, special attention paid to rapid dictation.

Group B—average group, dictation not so fast and principles stressed. Very often small groups develop from Group B and become——

Group C—those who need special help in clearing up some difficulties of principles. They join the second group just as fast as their difficulties have been cleared. So may those of the second group join the first as soon as the individual is ready.

The first five minutes of each lesson are devoted to a rapid drill on word signs from a chart, the class participating as a whole.

GROUP A

Assignment—Ten minutes.

As preparation for dictation, the teacher selects the more difficult words and phrases from the letters she is about to dictate and analyzes them in discussion with the members of the group. Then she dictates the letters and has them read back to her while she writes them on the blackboard as an example of correct form. She stresses particularly the words illustrating the principle for the day. Finally, the teacher dictates the letters which include the words and phrases she has just presented at the rate of speed which the group is ready to take. Then the teacher leaves the group to the group-leader and joins Group B.

Study—Five minutes.

Individual pupils, in turn, read back a letter or a part of a letter to the group-leader, who writes the correct forms on the blackboard while pupils interline the work in their note-books, correcting their errors as they write. The leader uses a "Speed Studies" and a "Key to Shorthand" as guides.

Assignment—Five minutes.

The teacher rejoins the group and dictates the letters faster than the first time and has them read back, stopping only to discuss difficulties. This is a check step only.

Study—Ten minutes.

The group-leader conducts the group in oral reading of shorthand, using the Key. He then dictates a part.

This brings the challenge to its final five minutes.

GROUP B

Study—Ten minutes.

At the beginning of the period, while Group A has the attention of the teacher, the pupils in Group B are writing at the blackboards the shorthand of the exercises in the *Gregg Manual*, applying some principles taught (assigned) the day before. The group-leader does the dictating. The work is then read back to the leader, who uses the book as model for correct form. By this time the teacher has left Group A and now joins Group B, to check exercises for which there is no model in the book.

Assignment—Five minutes.

The pupils of the group, with the teacher, move from blackboard to blackboard, criticising the shorthand and reading back their notes. The entire short Assignment is devoted to this checking step.

Study—Five minutes.

The teacher now leaves the group to practise forms they have written incorrectly or found difficult.

Assignment—Ten minutes.

The teacher now rejoins Group B and proceeds with the presentation of their new topic. The new point is “disjoined suffixes”; the teacher impresses the importance of the vowel sound going with the suffix. Analysis of words. This brings the work up to the final five minutes of the period.

SUMMARY OF THE LESSON

Showing the time division and the positions of the teacher:

First five minutes Drill on word signs. . . . Class in unit form <i>Teacher leading</i>	
GROUP A	GROUP B
<i>Assignment Ten minutes</i> New principle introduced. Difficult words. Dictation (<i>Teacher with this group</i>)	<i>Study Ten minutes</i> Application of the principle previously assigned. Dictation for practice by group-leader.
<i>Study Five minutes</i> Under group-leader. Read back the dictation. Correction of outlines.	<i>Assignment Five minutes</i> Check by <i>teacher</i> of the study results as done above.
<i>Assignment Five minutes</i> Check by <i>teacher</i> . Dictation at faster pace.	<i>Study Five minutes</i> Drill and practice on difficult forms under group-leader's direc- tion.
<i>Study Ten minutes</i> Oral reading of stenographic matter The same matter written from dictation. Under group-leader.	<i>Assignment Ten minutes</i> New principle developed under <i>teacher's</i> direction.
Last five minutes of the period Class as a unit in drill on phrases conducted by the <i>teacher</i> .	

MUSIC

Eighth Year

One is tempted to consider Music the ideal subject for unit treatment. Yet we all know that every Music classroom houses definite groups, unofficial, possibly unrecognized, but real. There are singers, there are imitators, and there are non-singers. When the existence of these groups is recognized the school may offer to each of these groups what it should

have. For the non-singers, who love music as much as the others but who are inarticulate, instrumental instruction can be offered as a substitute. We can vitalize the study of the intricacies of music if we can make these intricacies incidental to some not far distant accomplishment.

The instrument we use is the humble harmonica, traditionally the instrument of youth! Its cheapness, its fixed tones, its short apprenticeship endear it to the hearts of restless youth. So we effect a major grouping: the singers, the players. And the players are so anxious to play that they eagerly equip themselves with such technic as promotes their purpose.

Within the harmonica group are several sub-groups. One section may be going through a melody, the other may be occupied in writing the scale names of the notes in a piece they are to play shortly. Or the one section may be transcribing musical notation into harmonica notation while the other may be piecing together impromptu lines into a sort of song. Or while one group goes through a written drill on recognition of keys and placement of scales, another may be practising some troublesome succession of notes in a song.

There are endless possibilities for this interchange of activities—writing to playing, learning to doing, reviewing to creating. Grouping in the Music-room gives voice to the silent, melody to the monotone; and, last but far from least, opens the way to the establishment of contacts between teacher and pupils both intimate and constant.

A LIBRARY PERIOD

Seventh Year

Aim: To place books on shelves according to their "Class Number."

GROUP A	GROUP B
<p><i>Assignment:</i></p> <ol style="list-style-type: none"> 1. Recitation for apperceptive basis. 2. New work Class number. Call number. 	<p><i>Study:</i></p> <p>The working out of the problem assigned in the preceding period.</p>
Time: 20 minutes.	
<p><i>Study:</i></p> <p>Practical application of the Assignment</p> <ol style="list-style-type: none"> a. Pupils arrange books on shelves. b. For study and drill, pupils answer in written form questions from chart. <ol style="list-style-type: none"> 1. What is purpose of call number? 2. How are books arranged on shelves? 3. Write the following call numbers in order as books should be arranged on shelves. <p>630 398 590 290 398 H A S E K etc.</p>	<p><i>Assignment:</i></p> <p>The Assignment just driven to Group A is repeated for Group B.</p>
Time 20 minutes.	

Group A—Assignment group.

Questions for apperceptive purpose:

Q. How do you arrange your books at home in your book-case?

A. By size. . . . By color of binding.

Teacher shows the uselessness of such a plan, and gives the library arrangement according to subject-matter. For example:

Books on plants. Books on birds. Books on history, are grouped together.

Now the teacher shows that a "Class Number" is needed in order to arrange books by subjects. For example:

Books about animals are given the class number 590.

Books about plants 580. . . . Books about music 780, etc.

Where is the class number written? On the backs of the books.

How are they arranged on the shelves? According to these class numbers, beginning at the left with the lowest class number.

The group is shown books so arranged on the library shelves.

To teach "Call Number":

The children are led to notice that there is more than one book on each subject. And the question is raised: How do we decide upon the order in which they must stand on the shelves? Then they see that books with the same class number are arranged alphabetically by the surnames of the authors. The first letter of the author's name is written below the class number, thus: ⁹⁷³_F *History of the United States*, by Fiske. Then they are shown that a History written by Abbott would precede one written by Gerson, and *Montgomery's History* would follow both.

The teacher tells the group now that the class number, followed by the author letter, is called the "Call Number."

The Study step is the application of this Assignment. The pupils group about the book-shelves and arrange books in proper order. For drill, a chart is hung before the pupils when they return to their seats. It contains questions for study and drill as shown in the lesson plan.

Meanwhile, the B group has come to its Assignment and the teacher is busy with them, giving them the same instruction that she has already given the A group.

READING

Grade 1A

GROUP A

Five minutes—Assignment.

Culture Reading: Sentences given in answer to teacher's questions.

Five minutes—Study.

Old sight words.

Three minutes—Assignment.

Teacher hangs chart . . . review blend drill. Selects child-leader to conduct drill while teacher joins Group B.

Seven minutes—Assignment.

Teacher presents new sight words such as: "Four," "shoe." Also new phonograms and reviews old ones.

Two minutes—Study.

Child-leader hears his fellows on phonograms while teacher is with Group B.

Three minutes—Assignment.

Teacher lays out Study work to be done; some pupils to do this at seats, others at blackboards. Combinations 5 and 7.

Seven minutes—Study.

Group at work on material just assigned.

Teacher now with Group B.

Two minutes—Assignment.

Devoted to a check on Study work just done.

RECESS

Seven minutes.

Blending drill by both groups together.

Twelve minutes.

Oral reading by individuals.

Teacher with this group after leaving Group B.

Twelve minutes—Study.

Teacher now with Group B.



GROUP B

Five minutes—Study.

Teacher has placed pack of cards containing review sight words on ledge of blackboard. Child-leader conducts review quiz while the teacher joins Group A. Leader selects individuals in turn to select a card and call the word thereon.

Five minutes—Assignment.

Culture Reading: Sentences given in answer to teacher's questions; such as: "I went to the park."

Three minutes . . . to give out and explain Study preparation.

Each pupil receives a pack of splints from which he is to count out and make small packs of 5 splints, 10, 15, 16, 20, and 24.

Seven minutes—Study.

The counting and arranging of splints is carried on by the pupils alone.

Teacher now with Group A.

Two minutes—Assignment.

The teacher returns and checks the Study work just done.

Three minutes—Study.

Drill under child-leader on review blend chart.

Teacher now with Group A.

Seven minutes—Assignment.

Teacher presents new sight words, such as: Ball, me, and new phonograms such as: ll.

Reviews old phonograms such as: ab, ad, af, gr, br, sh, ch.

Two minutes—Study.

Individuals make sounds as leader holds cards.

RECESS

Seven minutes.

Blending drill.

Twelve minutes—Study.

Tracing of words previously written on paper by the teacher.

Twelve minutes—Assignment.

Oral reading by individuals.

Teacher with this group.

Sixth Year

One day in alternate periods of the Real and the Representative is diagrammed on pages 189 and 190.

A schematic plan of alternations indicating lap-overs in time and the oscillation of the teacher. His presence is indicated thus:*

THE GROUP-STUDY PLAN: A PUPIL-TEACHER
PARTNERSHIP

Comments by a Class Teacher

In the light of present-day vision, teaching resolves itself into a teacher-learner partnership. With this objective in view, classroom management must and will steadily aim to establish practical, workable devices in which each partner will give to and take from the partnership. The teacher, in the rôle of senior-silent-partner, will invest, direct, and also draw dividends.

In a school where this conception holds sway, it is interesting to note that practical devices are as numerous and varied as there are teachers engaged in establishing this relationship. How different is this from the "teacher-on-a-pedestal" conception, where the teacher sees her job from two angles only: first as a disciplinarian, and then as the chief factor in a forced feeding process.

But, it will be objected, the "Interest" doctrine is as old as the hills. We have all been brought up on it and the result isn't so bad. Just a cursory glance

GROUP A <i>Mathematics</i>	GROUP B <i>Mathematics</i>												
<p>* Assignment Counting objects—subtracting Buying and selling—Making change</p> <p>Problems (Study) Measurements and weights Use of scale—Metric units Individual problems set Buying and selling—yards, ounces, etc</p>	<p>Maxson Cards (Study) Individual study in fundamentals</p> <p>* Assignment Problems on measurement Printer's problems Compute square inches in a cover allowing margins</p>												
<i>Word Study</i>	<i>Word Study</i>												
<p>Study Selected list of nouns from reading to be looked up in the dictionary and illustrations copied</p>	<p>* Assignment Selected list of verbs from reading to be "acted out" in sentence-making Definitions elicited written out to be checked later</p>												
<p>* Grammar Assignment Present "preposition" concretely</p> <p>Pupils make list of all possible prepositions based on above demonstration (Study)</p>	<p>Study Group writing definitions in notebooks as the first step in their study</p>												
<p>* History Assignment Aim Forms of Colonial Government Proprietary (Penn) Penn's Treaty Extempore dramatization</p>	<p>* History Assignment Aim Forms of Colonial Government Bacon's Rebellion Extempore dramatization</p> <p>—continued with leaders while teacher joins Group A</p>												
<p>* Assignment Geography (Food-Supply) Using the Nat'l Geog Magazine Animal Vegetable Mineral—salt</p> <p>Pictures Application.</p>	<p>Study Industrial Geography Name all the material (foods) used in the family's dinner last night Make a "chart" showing those whose origin you know, and those you don't</p> <table><tr><td>1</td><td>Sugar</td><td>Sugar-cane</td><td>Louisiana</td></tr><tr><td>2</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td></tr></table> <p>Information from magazine, dictionary, pictures, fellows</p> <p>* Assignment Check by teacher</p>	1	Sugar	Sugar-cane	Louisiana	2				3			
1	Sugar	Sugar-cane	Louisiana										
2													
3													
<p>Study Classify the foods you ate yesterday under these topics</p>													
End of morning session													

AFTERNOON SESSION

* *Penmanship* exercise with class as a unit

* *Science*

Experimentation under teacher's direction.

An Assignment of a new topic.

Make a list of fabrics—
Tell what each is made of
as far as you can.

Fabric	Made of

Playground Period

- * 1. Mass exercises
2. Group games.

What materials were used
in constructing and furnish-
ing this classroom?

Tell what you know of
each and what you would
like to know.

* *Science*

Experimentation and or-
ganization under teacher's
direction.

An Assignment of a new
topic.

Social Science

Food-supply.

Stereoscopic views—a
stereopticon in the hands of
every pupil

* *Textile industries.*

Stereopticon views

An Assignment-discussion
of a new topic.

* *Music* period—* Two-part songs.

1. Class as chorus.
2. Rhythm study poetry, music, clocks, wind, flowing water.

End of afternoon session.

Note: No texts have been required except dictionary, magazines, Maxson Cards.

In the Assignments each object named has been translated in terms of sense—touch, sight, muscular sense, hearing.

at the figures on elementary and high school mortality and on juvenile delinquency, just a peep into orderly classrooms, often arenas of conflict in which the tide of victory alternates between disciplinarian teacher and learning-dodging pupil—and the result is not so good. When we consider how ill-fit even our graduates are to go from life in the school to the school of life, when we consider how few educated people are able to point to their school life as the source of some abiding interest, when we consider how few are those who have a dynamic view-point—even among the few who have an abiding interest—the result is not so good.

The trend to-day is learning and living. To this end, classroom management must “about face!” Self-activity, individually and socially applied, must hitch up to the “Interest” theory. The teacher’s job is that of organizer and cautious director who steadily steers the wheels toward the road of her own self-effacement. Let this senior-silent-partner-teacher arm herself with a capital stock of scientific teaching principles, a knowledge of child psychology, well-organized plans and a host of objective aids, the anticipatory but humble attitude of the scientist in his laboratory, the kindly hand and the watchful, seeing eye of the gardener, the apparent self-effacement of the wise parent—then class formation will cease to consist of six straight rows of seven pupils each in listening attitude. Children will move about as freely as they do in their homes, or sit or stand as the need arises.

In keeping with this ideal, a peep into our classroom finds a Study group of knitted brows in their seats; another group utilizing every inch of blackboard space—these blackboard workers make a social contribution, since the rest of us, later, in group formation, will travel from board to board to see what they have done and evaluate it; and a third group, standing, who come to “put their heads together,” on the solution of a problem or to learn something over again in a new way. Drill, review, application, project—the game spirit constantly brings new leaders to the fore. Inhibitions and social courtesies, imposed by their peers, are necessary by-products, just as are white blouses, clean skins, and clean teeth.

WHAT THE GROUP-STUDY PLAN MEANS

By a Class Teacher

The Group-Study Plan ! To the uninitiated teacher these words stand for trouble and wasted time. I shall try to tell you what they mean to an initiated teacher.

First, I shall tell of the direct effect upon the teacher. Second, I shall describe its direct working on the pupils. The teacher gradually finds herself relaxing from the heavy strain of ever exerting voice and will-power on each and every member of the class from front seat to back-corner seat. The numbers she addresses are smaller, cut in half or in thirds, so she doesn't have to raise her voice. Each pupil is

close to the teacher, so she doesn't worry about inattentive Johnny in the far corner.

Her attitude toward the children becomes more wholesome and natural, because the control of her class has passed out of her hands and into the hands of the children. There are able group-leaders and individuals with a sense of responsibility, and the work carries on without a pause, even though the teacher is called from the room. Naturally, much of the strain is gone, and the nerves of the teacher are stronger at the end of the day.

Now for the pupils: How are these group-leaders found and where does this sense of group responsibility come in? Why, the former are found by the system—and the latter in the most convenient spot. Group-teaching develops children as individuals, and when this occurs, and only then, are children really being educated. As these individuals develop, little flashes of originality come to light which lighten the atmosphere with an absorbing interest and wonder.

For example: In a seventh-year class, two boys were assigned the task, to teach Promissory Notes to their fellows. I have never seen a teacher give a better lesson. Without my help or suggestion, they spent hours in preparation. They went to a bank, interviewed the teller, obtained from him blank promissory notes, which they passed around the group. One did the explaining, defining all terms and making them clear. The other questioned, thoroughly and intelligently, at the end of each division of the lesson. They concluded their presentation by giving

a very interesting and understanding dramatization of the business situation involved.

Sometimes, for home study, I assigned each of four groups a section of a History lesson which was adapted to dramatization. The next day, under leaders, each group, in a different corner of the classroom, planned its presentation, which followed shortly. Each group performed in turn to the other three. It was most interesting to see the difficulties of the text yield to the ingenuity of the participants.

In an Adjustment Class (a class for retarded over-age pupils from the elementary schools) the Group Method is indispensable. The children in these classes are particularly responsive to individual encouragement and praise, which is impossible in a "mass" class. Moreover, this system keeps all actively busy, thus preventing much mischief due to indifferent idleness.

In conclusion, I should say that the teacher's aim, in the Group-Study Plan, is not to be the source of information, but to link the pupils to the source of information, to point the way, and to encourage the pupil to seize with his own hands the opportunity of an education.

CHAPTER X

AFTER MEASUREMENT: WHAT?

The Group-Study-Plan teacher is equipped to profit from the use of standard tests, measurements, and scales, because only through grouping can individual needs be corrected. It is suggested that the teacher make much use of tabulation-sheets or score-sheets as a scientific check upon the grouping. These will be based upon any of the "Intelligence" or "Ability" Tests now on the market: *The National Scales A and B*, Form 1 and Form 2 (this gives really four tests, of which it is well to use two for certainty of results); the *Otis Group*, Form A and B for lower grades, or Form A or B for higher grades; the *Terman Group Test* for grades 7 to 12 in Form A and B; the Illinois Examination, including both Intelligence and Achievement. Any of these will give an Intelligence Quotient (I. Q.) and a Mental Age (M. A.) for every pupil.

Now list the class on a large sheet of "insurance-ruled" paper in descending order of I. Q.'s or M. A.'s checked by the teacher's own estimate and the result is, first, a fortification of one's resolution in grouping because it becomes very obvious that the class is in need of group treatment on a quartile plan. Inspection of the list will assure the teacher of the folly of attempting a unit-class technic when it is so apparent that the class is not a unit in ability.

For the second step in developing the tabulation using some of the many very valuable "Achievement Scales," enter achievement results in columns to the right beside each pupil's name. Now we are on the way to making a "Correlation Score." Results will be very valuable. Comparison between I. Q. or M. A. and Achievement Scores will reveal (1) whether or not the grouping is correct; (2) weaknesses or strengths in the teaching, and (3) *whether or not the individual is working up to capacity*. No more vital result than the latter can be asked for. There is really no other way of determining this factor. If, for example, a pupil who scored high in I. Q. or M. A. scores low in achievement, the cause is, probably, failure to apply himself, and the future procedure is clearly indicated. If, conversely, a pupil with a low I. Q. scores high there is indicated superior application to study, determination to succeed—a character element has entered. It is to be borne in mind that all the standard tests are "scaled"—*i. e.*, the questions are so arranged that each is as much harder than the one before it as it is easier than the one following it. So relative accomplishment is shown.

Now a third group of tests comes into use. Having tabulated our scores in Ability and in Achievement we know:

(1) How to group in general; (2) how to shift individuals from group to group because of varying accomplishment in various subjects; (3) how much to expect of individuals. But for corrective and re-

medial purposes we need some help in diagnosis. That is, having found the things our individual pupils cannot do, we want to know why they cannot do them, and how to proceed to remedy the lack. For this purpose it is recommended that Diagnostic Scales and Tests be used freely. There are many available in the various subjects, and each comes with instructions for use and keys for scoring. They are not difficult to give or to score.

READING

The Group-Study Plan depends largely upon (silent) reading ability, so the teacher will be interested in Reading Scales primarily. * “Since silent reading serves us so extensively, one large problem of the school is to develop speedy, understanding readers. There must be found ways of doing this and ways of testing progress in speed and understanding.”

The Monroe Silent Reading Tests or the Fordyce Scales will give illuminating results, which, after special tabulation of scores, will indicate needs for remedial teaching in groups. The tests give scores in rate and in comprehension.

WRITING

Writing is the second important standby of the Group-Study Plan because note-books and black-

* Paulu, E. M., *Diagnostic Testing and Remedial Teaching*; p. 190. Heath, 1924.

boards are in constant use by the pupils. A checking system that works almost automatically is the writer's "Penmanship Checks," which every pupil memorizes and which are charted in every classroom for purposes of reminder. The checks are in four parts: I—*The stroke*. II—*The form*. III—*The swing*. IV—*Consistency*. I—*The stroke* is always vertical, slant in the writing being dependent upon the angle at which the paper is laid on the desk. "Vertical" paper with vertical stroke must give vertical writing. Therefore, the remedy for faulty "stroke" is to return to the vertical for a time. II—*Form* is a matter of observation and precision. III—*Swing* is the connecting "serifs" between letters and is merely the path of the pen. For remedial teaching an exaggerated swing between narrowed letters will focus attention and correct the fault. IV—*Consistency* results largely from I, II, and III. If the *stroke* is vertical in every case the general effect of the paper is bound to be consistent. If the letter form is *precise* there will result consistency because there is but one model. If the *swing* is uniform there will be a consistency in spacing. The "check" on writing is therefore never general, but always specific. Bad penmanship can be only a violation of one of the four checks—actually one of the first *three*. The child isn't just a "poor writer"; the diagnosis of the checks indicates in what particular he is deficient, and the remedial process is a very simple one of practice upon the one factor in which the weakness lies. If "stroke" is wobbly and inconsistent, use

insurance-ruled paper and let the down stroke be guided by the vertical lines on the paper. Keep this up until the point is impressed. Precision of form is attained by requiring it. Every child from the first year on is capable of imitation of standard letter forms. It is a matter of insistence and vigilance and habit formation. "Swing" is remedied by exaggeration continued until the fault is cured. The Penmanship Checks actually automatize the handwriting to the point where every pupil can write well, and without the teacher's immediate supervision.

The Penmanship Checks

- | | | |
|----------------|-----------|-----------------|
| 1. Stroke | . | vertical |
| 2. Letter. | | precise in form |
| 3. Swing | | exaggerated |
| 4. Consistency | | |

Speed is never mentioned. Pace in penmanship is not a matter of conscious effort or hurry. Whatever speed is achieved results from the "checks"; *stroke*, *precision*, *swing*, combine toward ease of flow; and speed is nothing else but ease in economy. The Ayres Gettysburg Scale may be used for measurement if one is needed.

Arithmetic.—The Woody Scales may be used from the second grade through the eighth; the Monroe Scales from the third grade through the eighth.

Geography.—The Hahn-Lackey Scale for grades

four through eight is very inexpensive; the Courtis Standard Test is useful.

History.—The Harlan Scale is for seventh and eighth grades; Von Wagenen for grades eight to twelve.

Algebra.—The Hotz Scales in five parts.

Spelling.—Ayres; Buckingham Extension.

The Group-Study Plan is for the use of skilled teachers. Professionals need equipment in technic, in measurement, in remedial instruction. The writer urges upon the interested professional teacher the use of every device and aid toward the study of the individual pupil, his abilities, his interests, his aptitudes, his needs. The teacher should investigate the measurement field, beginning with standard texts such as Pressey's *Introduction to the Use of Standard Tests*, World Book Co., 1926; Paulu's *Diagnostic Testing and Remedial Teaching*, Heath, 1924. Both of these books are simple, direct, and very helpful; both contain bibliographies.

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